

Supreme Court, U. S.

FILED

JUN 6 1979

MICHAEL RODAK, JR., CLERK

In The  
**Supreme Court of the United States**  
OCTOBER TERM, 1979

No. **78-1831**

HESSTON CORPORATION,

*Petitioner,*

vs.

DEERE & COMPANY,

*Respondent.*

**PETITION FOR A WRIT OF CERTIORARI TO THE  
UNITED STATES COURT OF APPEALS  
FOR THE TENTH CIRCUIT**

GORDON D. SCHMIDT

WARREN N. WILLIAMS

1400 Mercantile Tower

1101 Walnut Street

Kansas City, Missouri 64106

*Counsel for Petitioner*

## INDEX

Opinions Below .....	1
Jurisdiction .....	2
Questions Presented .....	2
Introductory Statement .....	4
Constitutional Provision and Statutes Involved .....	4
Statement of the Case .....	5
The Case Involves Thirty-Five Claims of Eight Patents .....	5
The Patent Claims in Issue Define the Inventions in Terms of Machine and Method .....	5
Initial Trial and Error Failures Ended in an Un- successful Abandoned Experiment .....	6
The Patent Claims in Issue Reject the Prior Fail- ures and Cover Only the Successful Solutions ....	8
The Opinion of the District Court .....	9
The Opinion of the Court of Appeals .....	10
Reasons for Granting the Writ .....	12
As to Synergism .....	12
As to Experimental Use and Sale .....	15
The New Approach .....	15
Rejection of New Theory and Rule .....	16
As to Examination of Separate Claims .....	19
Conclusion .....	22
Appendix—	
Judgment of the District Court .....	A1
Opinion of the District Court .....	A2

Decision of the Court of Appeals .....	A26
Judgment of the Court of Appeals .....	A48
Patent Claims at Issue .....	A49
Chapter 706 of the Manual of Patent Examining Procedure .....	A58
Herschensohn, et al. v. Hoffman, et al., No. 77-1718 and No. 77-2638 (9th Cir. 1979) .....	A63
Reinke Manufacturing Company, Inc. v. Sidney Manufacturing Corporation, No. 78-1341 and No. 78-1301 (8th Cir. 1979) .....	A75
Constitutional and Statutory Provisions .....	A93

#### Citations

##### CASES

<i>Altoona Publix Theatres, Inc. v. American Tri-Ergon Corp.</i> , 294 U.S. 477, 55 S.Ct. 455, 79 L.Ed. 1005 (1935)	19, 20
<i>American Machine &amp; Hydraulics, Inc.</i> , 585 F.2d 404 (9th Cir. 1978) .....	18
<i>Anderson's-Black Rock, Inc. v. Pavement Salvage Co., Inc.</i> , 396 U.S. 57, 90 S.Ct. 305, 24 L.Ed.2d 258 (1969) .....	14
<i>Austin v. Marco Dental Products, Inc.</i> , 560 F.2d 966, 969 (9th Cir. 1977) .....	18
<i>B.G. Corp. v. Walter Kidde &amp; Co.</i> , 79 F.2d 20 (2nd Cir. 1935) .....	21
<i>City of Elizabeth v. American Nicholson Pavement Co.</i> , 97 U.S. 126, 24 L.Ed. 1000 (1878) .....	15, 16, 17, 18
<i>Clark Equipment Company, et al. v. Keller</i> , 570 F.2d 778 (8th Cir. 1978) .....	13
<i>Coffin v. Ogden</i> , 85 U.S. (18 Wall. 120-125) (1874) .....	15
<i>Dart Industries, Inc. v. E. I. Dupont De Nemours and Co.</i> , 489 F.2d 1359 (7th Cir. 1973) .....	18

<i>Electric Storage Battery v. Shimadzu</i> , 307 U.S. 5, 83 L. Ed. 1071 (1939) .....	15
<i>Graham v. Deere</i> , 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966) .....	4, 12, 19, 20
<i>Herschensohn, et al. v. Hoffman, et al.</i> , No. 77-1718 and No. 77-2638 (9th Cir. 1979) .....	12, 13
<i>McCullough Tool Company v. Wells Surveys, Inc.</i> , 343 F.2d 381 (10th Cir. 1965) .....	19
<i>Merrill v. Builders Ornamental Iron Company</i> , 197 F.2d 16 (10th Cir. 1952) .....	19
<i>Reckendorfer v. Faber</i> , 92 U.S. 347, 23 L.Ed. 719 (1876) .....	21
<i>Red Cross Manufacturing Corp. v. Toro Sales</i> , 525 F.2d 1135 (9th Cir. 1975) .....	18
<i>Reeves Instrument Corp. v. Beckman Instruments, Inc.</i> , 444 F.2d 263 (9th Cir. 1971) .....	20
<i>Reiner v. I. Leon Co.</i> , 285 F.2d 501 (2nd Cir. 1960) .....	20
<i>Reinke Manufacturing Co., Inc. v. Sidney Manufactur- ing Corp.</i> , No. 78-1341 and No. 78-1301 (8th Cir. 1979) .....	13
<i>Republic Industries, Inc. v. Schlage Lock Co.</i> , 592 F.2d 963 (7th Cir. 1979) .....	12, 14
<i>Robbins Co. v. Lawrence Manufacturing Co.</i> , 482 F.2d 426 (9th Cir. 1973) .....	10, 15-16, 18
<i>Sakraida v. Ag Pro, Inc.</i> , 425 U.S. 273, 96 S.Ct. 1532, 47 L.Ed.2d 784 (1976) .....	10-11, 14
<i>Smith &amp; Griggs Manufacturing Co. v. Sprague</i> , 123 U.S. 249, 8 S.Ct. 122, 31 L.Ed. 141 (1887) .....	15
<i>United States v. Adams</i> , 383 U.S. 39, 86 S.Ct. 708, 15 L.Ed.2d 572 (1966) .....	13, 14
<i>Universal Marion Corp. v. Warner &amp; Swasey Co.</i> , 354 F.2d 541 (10th Cir. 1965) .....	19
<i>Yarn Processing Patent Validity Litigation, In re</i> , 498 F.2d 271 (5th Cir. 1974) .....	16, 17, 18

## CONSTITUTIONAL PROVISIONS AND STATUTES

U.S. Constitution, Article I, Section 8, Clause 8 .....	4
28 U.S.C. § 1254(1) .....	2
28 U.S.C. § 1338(a) .....	2
28 U.S.C. § 2201 .....	2
Patent Code of 1952, 35 U.S.C. §§ 101-103, 112 .....	2, 3,
	10, 11, 20, 21

**In The  
Supreme Court of the United States**

OCTOBER TERM, 1979

No. ....

**HESSTON CORPORATION,  
Petitioner,**

vs.

**DEERE & COMPANY,  
Respondent.**

**PETITION FOR A WRIT OF CERTIORARI TO THE  
UNITED STATES COURT OF APPEALS  
FOR THE TENTH CIRCUIT**

Petitioner, Hesston Corporation, prays that a Writ of Certiorari issue to review the judgment of the United States Court of Appeals for the Tenth Circuit in the above-entitled case.

**OPINIONS BELOW**

The opinion of the District Court for the District of Utah, Central Division is reported at 456 F. Supp. 520, and is reprinted in the Appendix at p. A2, *infra*. The decision of the Court of Appeals is reported at 593 F.2d 956 and is reprinted in the Appendix, at p. A26, *infra*. The judgment of the District Court was filed May 4, 1977 (Appendix, p. A1, *infra*). The judgment of the Court of Appeals was entered on March 9, 1979 (Appendix, p. A48, *infra*).

## JURISDICTION

The jurisdiction of this Court is invoked pursuant to 28 U.S.C. § 1254(1). The basis of jurisdiction in the District Court was 28 U.S.C. §§ 1338(a) and 2201.

## QUESTIONS PRESENTED

This Petition is limited to three important legal issues, each of which involves directly opposite viewpoints and distinct conflicts among the Courts of Appeal:

1. Where, after conceding petitioner's eight mechanical patents relating to a loose hay stacking wagon define novel combinations producing a "striking result", whether or not the Court of Appeals was correct in ruling that the patents are invalid for failure to produce a synergistic effect, thus further magnifying the conflict that exists among the circuits as to whether or not, in addition to novelty, utility and nonobviousness as prescribed by 35 U.S.C. §§ 101, 102 and 103, a patentee must meet a fourth, non-statutory condition of patentability based on synergism, where performance of the elements, after they have been combined, has become the focal point of inquiry, rather than the obviousness or nonobviousness of making the combination.

2. Whether or not the Court of Appeals for the Tenth Circuit legally invalidated the entire series of thirty-five patent claims at issue under the provisions of 35 U.S.C. § 102(b), precluding the right to patent protection if the invention was in public use or on sale more than one year prior to the date of the patent application, by holding a machine, advertised and sold in an incomplete stage, to be prior art according to a new rigid approach by the Ninth

Circuit, conflicting with the rule of this Court and the Fifth Circuit that the seller's intent must be considered, in view of the following circumstances:

- (a) sale of a single, substantially incomplete machine with a bona fide, good faith intent of experimental use;
- (b) abandonment of the machine as unsatisfactory without its ever having been completed;
- (c) refund of the purchase price by the seller;
- (d) the machine failing to consist of a finished, working embodiment in objective form as a reduction to practice of the invention of any of the patent claims;
- (e) the machine being limited to an attempt to carry out, in a particular manner, only a single step in the overall operation of the inventive concept, not thereafter included in the patent claims at issue;
- (f) abandonment of that particular manner of performing the single step contemplated by the original concept;
- (g) the machine representing an incomplete stage of development such that the patented inventions, as claimed, were not as yet functional for public use purposes; and
- (h) a subsequent requirement for substantial and lengthy experimentation before reduction to practice became a reality.

3. Whether or not the patents in suit were legally invalidated, without examination of the separate claims, by treating the inventions as mere combinations of functions, in view of the statutory requirement of 35 U.S.C. § 112 that the inventions of all patents are to be defined solely by

their claims, expressed as specified elements or steps capable of producing certain results, where all the claims at issue are, in fact, directed to combinations of clear, distinct, well-defined elements and steps.

### **INTRODUCTORY STATEMENT**

This case stands as a classic example of the considerable diversity of opinion existing in the district courts and in the courts of appeals as to the proper interpretation of the decisions of this Court in several important areas relating to validity of patents. While, to some extent, the courts have referred to the tests laid down thirteen years ago in *Graham v. Deere*, 383 U.S. 1, 16, 15 L.Ed.2d 545, 556, 86 S.Ct. 684 (1966), the principle of nationwide uniformity of patent decisions continues to seriously deteriorate as the result of distinct conflicts arising from uncertainties in legal concepts relating both directly and indirectly to those tests and the proper manner of their application.

We shall show in this petition that this case furnishes an ideal opportunity for this Court, by granting certiorari, to lend its assistance once again to the current confusion developed as the result of substantially different and opposite viewpoints of the meaning of both statutory and case law dealing with patentability of inventions.

### **CONSTITUTIONAL PROVISION AND STATUTES INVOLVED**

This case involves Clause 8 of Section 8 of the Constitution of the United States and Sections 101, 102, 103 and 112 of Title 35 of the United States Code (Appendix, commencing at p. A49, *infra*).

### **STATEMENT OF THE CASE**

#### **The Case Involves Thirty-five Claims of Eight Patents**

The opinion of the District Court is limited simply to identification of the patent claims in issue by number (Appendix, pp. A3, 4, *infra*) and the opinion of the Court of Appeals does not go beyond identification by number of each patent in suit (Appendix, p. A28, *infra*). The claims themselves are not reproduced and no significant reference is made to any of the claims in either opinion, much less their contents, limitations and coverage. The claims are, therefore, necessarily reprinted in the Appendix commencing at p. A49, *infra*.

#### **The Patent Claims in Issue Define the Inventions in Terms of Machine and Method**

Briefly outlined, the patented inventions relate to the hay stacking art, employing a time, labor and cost saving, agricultural implement used by farmers and ranchers. The large, untied, outdoor, movable, weather resistant, machine-made stacks produced by the inventions had never before been seen or known by mankind. The implement is advanced through the field of long loose hay previously raked into windrows. By automatic operation, the machine picks up the hay out of the windrow and raises it well above ground level. The hay is continuously discharged rearwardly, fed into a stack-forming receptacle and layered evenly therein. The operation continues without interruption until the receptacle is filled, whereupon advancement is stopped briefly while the collected hay is packed downwardly against the bed of the machine and shaped into stack-form.

The steps are repeated until a large compact stack of proper configuration and uniform density is completely formed in the field off the ground in a short period of time without need for manual labor. The machine then serves the additional purpose of hauling the stack to a point of off loading, at which time the rear end of the receptacle is opened and the stack is forced outwardly for deposit on the ground. The only workman involved throughout is the driver who never needs to leave the tractor used to place the mobile stacker in tow. The critical steps of effecting proper layering, distribution, density and formation, as required, result in stacks capable of withstanding outside storage under the severest of weather conditions without need for tying.

**Initial Trial and Error Failures Ended in an Unsuccessful Abandoned Experiment**

While the mental concept of field stacking within a wagon originated with Cordell Lundahl as early as 1964, inasmuch as his initial ideas, vague and generalized as they were, presented many complex problems, long and difficult experimentation was required before Hesston was able, five years later, to commence production of the first commercially practical machine. The critical requirements of the concept were never developed by Lundahl beyond the talking stage.

The basic difficulty arose from the fact that Lundahl thought in terms of compressing the hay horizontally in a ram-like manner the same as he understood the operation of an ordinary hay baler. It was not until Hesston entered the program after mid-1966 that failure was finally turned into success by Hesston through conception and development of an altogether different approach. Hesston's work demonstrated that formation of large stacks while advancing

through the field was an entirely new art, vastly different in principle and in challenge from traditional production of small bales, hay cocks, bunches or handmade stacks.

Long prior to commencement of steps needed for commercial production and marketing of the inventions ultimately patented, a horizontal compression, non self loading *prototype* was pictured in an advertisement for sale. Those pictures embodied none of the features later found to be essential to building of stacks acceptable to the haying industry.

The advertisement's promise of an untested, one man operation led one customer to inquire and make an offer to buy. Lundahl was only able to deliver a crude, essentially handmade contraption embodying, as in the pictured prototype, little of consequence other than an enlarged, horizontal hay-baling ram for compression purposes (referred to in this case as the "DePuy Wagon"). It was only a reproduction of one of his prior prototypes, limited essentially to testing ram compression of larger volumes of hay than is fed to conventional balers. Of vastly lesser importance in the wagon was an effort to "top out" the stack with swingable gates and tuckers. Hesston even abandoned its efforts to use gates as a means of compressing.

Lundahl's good faith intent was established during the trial, as a witness for respondent Deere, by virtue of his testimony that the purchaser had been apprised of the fact that Lundahl considered his staking procedures to be merely in the stage of experimentation and learning; and he kept abreast of the attempted use made of the DePuy Wagon, in order, as he admitted, to learn more about how to stack hay.

The use made of the DePuy Wagon was, at best frustrating and fraught with difficulties. As distinguished

from all of the inventions of the patents in suit, the wagon had to be filled with hay, as it remained stationary in the field, by use of another machine as illustrated in the advertisement. The hay in the stacks was not uniform in either distribution or density and, as the result of horizontal compression, the stacks were wholly unsatisfactory because of a series of vertical, rain-receiving cleavages. Breakdowns of the wagon required frequent repair and replacement of parts, and it was inherently incapable, during advancement, of picking up, elevating, feeding, or distributing the hay evenly prior to ram compaction.

The experimental DePuy Wagon was totally unsucessful and soon abandoned, following which the disappointed purchaser reverted to prior haying procedures, instituted a civil action and recovered the purchase price without ever having the dire need satisfied as anticipated when considering, with enthusiasm, the overstatements of the Lundahl advertisement.

The DePuy machine was a single instance. Lundahl never did tool up for commercial production. Never again was anything ever produced even remotely comparable to the DePuy machine for test, for public distribution, or otherwise. The failure stopped his further progress and after sell-out to Hesston, he abandoned all efforts to complete the DePuy Wagon, perfect a machine of the type which comprised the DePuy experiment or carry out the unfulfilled promise of the advertisement.

#### **The Patent Claims in Issue Reject the Prior Failures and Cover Only the Successful Solutions**

Immediately upon its acquisition of Lundahl's ideas on stacking, Hesston instituted an about-face approach. *On Lundahl's recommendation*, the baler-ram theory for making large stacks was wholly discarded and never again

tried. Hesston continued the Lundahl experimentation program and then, dissatisfied, proceeded on its own. Late in the summer of 1968 Hesston was responsible for the first reduction to practice.

At no time thereafter did Hesston seek patent protection evenly remotely suggestive of producing a haystack in a manner comparable to the notoriously old implements for making small, wire or string tied bales which, except for tying, constituted the heart of the DePuy Wagon. And it follows that not a single patent claim in issue is so directed, not even those contained within the two Lundahl patents in suit (Appendix, pp. A49-51, *infra*). The ram of the DePuy machine is not shown, described, claimed or contemplated by any patent in suit. Instead, all of the claims involved in this case cover combinations of elements or steps which, unlike the DePuy Wagon, have, in fact, solved the long-felt need and produced highly advantageous, commercially accepted and successful results, precisely as respondent Deere also experienced at a much later date in the accused machines charged as substantial copies of those of Hesston.

#### **The Opinion of the District Court**

Invalidation of Hesston's patents by the District Court resulted from three, unorthodox and legally incorrect, primary approaches to the question of patentability of the inventions.

*First*, it was the District Court's opinion, without record proofs, that Hesston's inventions failed to meet the test of synergism as a condition for patentability (Appendix, p. A33, *infra*).

*Second*, the District Court ignored Tenth Circuit precedent and the rules of this Court, relying instead on a

decision of the Court of Appeals for the Ninth Circuit, *Robbins Co. v. Lawrence Manufacturing Company*, 482 F.2d 426, 433 (9th Cir. 1973), to support the opinion that "the advertisement and sale of the DePuy machine did not contain 'an express or clearly implied condition that the sale or offering is made primarily for experimental use'" (Appendix, p. A25, *infra*).

Rejecting, therefore, Hesston's contention that the DePuy Wagon demonstrated an experimental use exception to 35 U.S.C. § 102(b) (Appendix, p. A25, *infra*), the District Court relied heavily on the incomplete, abandoned machine and its use as a salient and highly significant prior art disclosure fully applicable as a primary reference against all of the four basic patents in suit (Appendix, pp. A17, 24, *infra*). In absence of the heavy reliance by the District Court upon the insignificant, unsatisfactory teachings of the DePuy Wagon (even if it were properly available as prior art) it would have been impossible to arrive at a persuasive holding of invalidity based solely on the disclosures in the secondary prior art patents of record.

Third, the District Court understood that the purpose of patent claims is to disclose the *functions* of the machine and method as distinguished from the mechanical means and steps for bringing about the end result of producing haystacks. On that basis the Court found it to be but necessary, in order to invalidate the claims, to try to find prior art references disclosing each *function* respectively, disregarding the question of whether or not the prior art taught the combinations of elements of the machine claims and the steps of the method claims (Appendix, p. A19, *infra*).

#### **The Opinion of the Court of Appeals**

On the question of synergism, the Court of Appeals interpreted the opinion of this Court in *Sakraida v. Ag*

*Pro, Inc.*, 425 U.S. 273, 96 S.Ct. 1532, 47 L.Ed.2d 784 (1976) to be that the combination claims of Hesston's patents cannot be upheld in absence of a synergistic effect (Appendix, p. A38, *infra*). On that interpretation, it was found that "the trial court was not incorrect, as we view it, in holding that the Hesston patents did not achieve a synergistic result that would be nonobvious to one reasonably skilled in the art" (Appendix, p. A38, *infra*). No explanation is given as to wherein Congress intended § 103 to be so interpreted.

On the question of unsuccessful, abandoned experimental use of the DePuy Wagon, the Court of Appeals made no evaluation, simply ruling that prior use or sale under 35 U.S.C. § 102(b) is supported by the evidence (Appendix, p. A39, *infra*).

On the question of whether or not the claims in issue define the inventions in terms of function, the Court of Appeals made no analysis of any claim; instead it is merely said in the opinion that, "Hesston's patents \* \* \* combined old elements which continue to *function* as they did previously" and "do not in combination perform a new and different *function* even though the wagons did succeed in producing a striking result by combining the old elements" (emphasis supplied) (Appendix, pp. A38, 39, *infra*).

In essence, the opinion of the Court of Appeals is a condensed paraphrase of the opinion of the District Court. Neither Court reached the issue of infringement or its effect, as a secondary consideration, upon the question of validity notwithstanding the fact that the Court of Appeals observed that all of Deere's machines "appeared to be based upon the same design as the Hesston machine" (Appendix, p. A31, *infra*).

## REASONS FOR GRANTING THE WRIT

### As to Synergism

As a matter of decisional law, the concept of synergism as a test for measuring validity of so-called "combination" patents has resulted in a multiplicity of conflicting views not only in definition but as to application and materiality. The conflict *must* be resolved because, as most recently observed by the Court of Appeals for the Seventh Circuit:

\* \* \* synergism has prevented the development of a consistent, predictable body of law under section 103 \* \* \*. *Republic Industries, Inc. v. Schlage Lock Company*, 592 F.2d 963, 972 (7th Cir. 1979).

In the *Republic* decision, synergism is specifically and bluntly rejected and discarded as a condition for patentability with a ruling that *Graham v. Deere* sets the exclusive tests for measuring nonobviousness under § 103 (592 F.2d 963, 972).

Moreover, the United States Patent Office continues to issue patents, with no requirement whatsoever for a synergistic effect, by virtue of a directive to the Patent Office Examiners from the Commissioner of Patents and Trademarks in Chapter 706 of the Manual of Patent Examining Procedure (Appendix, pp. A58, 61, *infra*).

Directly contrary to the Patent Office and the Seventh Circuit viewpoint are numerous decisions among the various Courts of Appeal. For example, in the Ninth Circuit, it was recently held that, inasmuch as the "Plaintiffs failed to identify a synergistic result \* \* \* the patent is not valid, having no new, unusual or synergistic result \* \* \*." *Herschensohn, et al. v. Hoffman, et al.*, No. 77-1718 and No. 77-2638 (9th Cir. 1979) (Appendix, pp. A63, 68, 70, *infra*).

Similarly in the Eighth Circuit, it was held that " \* \* \* one of the factors this court must look for in determining whether the patent meets section 103 requirements is synergism." Finding no synergism, the patents in suit were found to be invalid. *Reinke Manufacturing Company, Inc. v. Sidney Manufacturing Corporation*, No. 78-1341 and No. 78-1301 (8th Cir. 1979) (Appendix, pp. A75, 82, 89, *infra*).

Neither in *Herschensohn* nor in *Reinke* did the Courts mention or discuss *Republic* which emphatically repudiates the synergism doctrine.

Significantly, differing panels within the Eighth Circuit do not even appear to be in complete agreement. While in *Reinke* it was held that the court *must* look for synergism, one year earlier the Court found that " \* \* \* we need not address the question of whether or not a synergism analysis was mandatory on the facts here", irrespective of the fact that the District Court made "no explicit analysis of synergism." *Clark Equipment Company, et al. v. Keller*, 570 F.2d 778, 788, 789 (8th Cir. 1978).

But, Judge Gibson went on to observe in *Clark* that "in patent law context, 'synergism' has no talismanic power; synergism is merely one indication of nonobviousness \* \* \* form would triumph over substance were we to hold this analysis inadequate for lack of specific reference to synergism \* \* \* " (570 F.2d 778, 789).

While *Clark* (the Eighth Circuit case) is cited by the Seventh Circuit in *Reinke*, no mention is made in the later decision of the discussions on synergism in the earlier Eighth Circuit case.

As stated by this Court in *United States v. Adams*, 383 U.S. 39, 50, 86 S.Ct. 708, 713, 15 L.Ed.2d 572 (1966):

If . . . a combination is novel, the issue is whether bringing them together as taught by [the inventor] was obvious in the light of the prior art.

The *Republic* court, after referencing the above quotation from *Adams* observed that:

Synergism, however, precludes this analysis. Because synergism centers exclusively on the performance of the elements *after* combination and without regard to the obviousness or nonobviousness of *making the combination*, synergism does not comport with the Graham mandate to apply section 103. (Page 971, emphasis by the court).

Presented, therefore, is the question of whether or not patents shall continue to be issued with no requirement for synergism whereupon, depending upon the forum chosen for litigation, patentees will be forced to thereafter attempt to prove synergistic effect in accordance with the special definition that may have been or will be selected for the doctrine in that particular circuit.

Equally important is whether or not, in the scathing opinion of *Republic*, treating synergism, in effect, as utter nonsense, it is correct to conclude that this Court never intended to condition patentability upon the existence of synergism either in *Anderson's-Black Rock, Inc. v. Pavement Salvage Co., Inc.*, 396 U.S. 57, 90 S.Ct. 305, 24 L.Ed. 2d 258 (1969) or in *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 96 S.Ct. 1532, 47 L.Ed.2d 784 (1976) (529 F.2d 963, 968-969).

Inasmuch as "synergistic", borrowed from the language of chemistry to denote the effect of combining ingredients, is a word newly voguish in reference to mechanical claims, should it, as suggested in *Republic*, not

now go into the limbo reserved for other vogue words of yesteryear?

#### As to Experimental Use and Sale

In more than 100 years this Court has not modified its viewpoint that the public derives benefits from adequate periods of time to conduct experiments for perfection of inventions. *City of Elizabeth v. American Nicholson Pavement Co.*, 97 U.S. 126, 24 L.Ed. 1000 (1878). A bona fide intent of testing the qualities of a machine, carried out in good faith under the surveillance of the inventor prior to commencement of sales for general use, does not bring an invention into public use under the statute, whether or not reduction to practice occurs prior to sale, whether or not changes are thereafter required, and regardless of the extent of public knowledge or use of the invention under test (97 U.S. 126, 133-135, 24 L.Ed. 100, 1004-1005).

Moreover, the defendant has the burden of showing that the invention in alleged public use was (a) complete, (b) capable of working and producing the result sought to be accomplished, (c) of practical efficacy and utility and (d) successful (*Coffin v. Ogden*, 85 U.S. (18 Wall. 120-125 (1874), aside from the question of continuous and extensive production. *Electric Storage Battery v. Shimadzu*, 307 U.S. 5, 18-20, 83 L.Ed. 1071, 1080, 1081 (1939). In any event, determination *must* be made as to which, if any, of the patent claims in issue cover the alleged public use. *Smith & Griggs Mfg. Co. v. Sprague*, 123 U.S. 249, 265-267, 8 S.Ct. 122, 31 L.Ed. 141, 147 (1887).

#### The New Approach

However, in 1973 the Ninth Circuit proceeded on a new theory and adopted a new rule. *Robbins Company*

v. *Lawrence Manufacturing Company*, 482 F.2d 426, 433 (9th Cir. 1973). It was held therein that no inquiry can even be made into the matter of experimentation *unless* there is an express or clearly implied condition actually contained within the contract of sale or the offer for sale that it is made primarily for experimentation.

Contrary to the rules of this Court, in the Ninth Circuit, no inquiry can be made into good faith and bona fide intent. Only limited inquiry into the circumstances surrounding an advertisement for sale or delivery can be made *unless* the preexisting condition is first shown to exist *therein*. Inquiry is permissible only (1) if the experimental nature is *stated* in the contract or offer for sale; or (2) the device is shown to be experimental *and* no workable prototype exists; or (3) there is a confidential relationship; or (4) reports are supplied the inventor or (5) similar statements appeared from which experimental purpose can be implied (482 F.2d 426, 433).

Such is the new theory and rule also adopted herein by the District Court (Appendix, p. A25, *infra*) and supported by the Court of Appeals (Appendix, p. A39, *infra*).

#### Rejection of New Theory and Rule

A direct and highly significant conflict has resulted in the Fifth Circuit's *express* refusal to adopt the Ninth Circuit rule and now, as the result of the Tenth Circuit's selection of a rule which the Fifth Circuit considers merely "a trap for the unwary"; which "could work injustice" and which is "excessively rigid." *In Re Yarn Processing Patent Validity Litigation*, 498 F.2d 271, 287 (5th Cir. 1974).

In *Yarn*, it is expressly stated that the rule *today* is still that of this Court laid down by *Elizabeth* (498 F.2d 271, 277) (emphasis added). The case stands for the prop-

osition that a bona fide experimental intent is the primary, determining factor, "even if that intent is not indicated within a contract of sale or offering", contrary to the new Ninth Circuit rule (498 F.2d 271, 287). After discussion of several divergent points of view in prior decisions, the court indicated its "full agreement" with this Court, concluding:

Faced with this possible conflict, we of course follow the Supreme Court's view. (498 F.2d 271, 285).

Considerable emphasis is placed in *Yarn* upon the fact that under the *Elizabeth* rule completion of the invention (reduction to practice), resulting in no need for change after the test, does not necessarily, of itself, constitute a bar, as long as experimentation was the primary motive in order to bring the invention to perfection.

But more importantly, insofar as the instant case is concerned, *Yarn* makes it abundantly clear that there can be *no* public use or sale bar "before a finished working prototype embodying the *claims* of the later patent exists in objective form" (emphasis added). This legal reality is so directly applicable to the instant facts hereinabove outlined as to warrant further quotation from *Yarn*:

Of course there can be no public use or sale of the invention during phase two\*, but, strictly speaking, *this is not by operation of the experimental use exception* (emphasis supplied).

Rather, there can be no public use or sale because there cannot be *any* use or sale of the invention at all, since

---

\*Briefly, the court considered four phases of development of an invention: (1) the initial conception, (2) attempts to build a prototype, ending with completion of "a working model that substantially embodies the claims later to be patented", (3) experimentation with that model to prove fitness for its intended purpose and (4) seeking and obtaining patent protection (498 F.2d 271, 275).

it is not in existence but is merely in an incomplete stage of development. (Emphasis in original). The possibility of public use or sale does not even arise until the end of phase two; before that, the invention is not yet "functional for public use purposes." (498 F.2d 271, 284).

The Seventh Circuit, citing *Elizabeth*, agrees with the Fifth Circuit, that the rule today is a matter of "the inventor's intent" (*Red Cross Mfg. Corp. v. Toro Sales*, 525 F.2d 1135, 1144 (9th Cir. 1975)), contrary to the viewpoint in the Ninth Circuit. Significantly also, in conflict with the results of the instant case, *Red Cross* emphasizes, as in *Yarn*, that determination *must* be made of whether or not the use and sale was made of the *inventions as claimed* in the patents (525 F.2d 1135, 1141-1143). That is, all important is the question of whether or not it (the claimed invention) was complete and working, as fully and carefully analyzed in *Yarn* (498 F.2d 271, 280-283) and in *Dart Industries, Inc. v. E.I. Dupont De Nemours and Co.*, 489 F.2d 1359, 1365 (7th Cir. 1973).

Also contrary to the results of the instant case by virtue of adoption of the rule of *Robbins*, is the fact that subsequent thereto, even the Ninth Circuit recognized that, despite the *Robbins* rule, an incomplete invention cannot be "on sale". *Austin v. Marco Dental Products, Inc.*, 560 F.2d 966, 969 (9th Cir. 1977).

The Ninth Circuit now acknowledges its rule does not "harmonize" with an interpretation of the Fifth Circuit rule that "the inventors subjective intent is a crucial issue in respect to public use, *vel non.*" *American Machine & Hydraulics Inc.*, 585 F.2d 404, 405 (9th Cir. 1978).

Unexplained is why the Court of Appeals herein condoned the switch-over by the District Court to the Ninth

Circuit rule contrary to the prior, long-standing rule of the Tenth Circuit, which consistently followed this Court's view. See *Merrill v. Builders Ornamental Iron Co.*, 197 F.2d 16, 19 (10th Cir. 1952) saying that good faith is "the determining factor", followed for example, by *McCullough Tool Co. v. Well Surveys, Inc.*, 343 F.2d 381, 393 (10th Cir. 1965) and by *Universal Marion Corp. v. Warner & Swasey Co.*, 354 F.2d 541, 545 (10th Cir. 1965).

#### **As to Examination of Separate Claims**

Manifestly, application of appropriate standards by the courts requires that they ascertain the "differences between the prior art and the claims at issue". *Graham v. Deere*, 383 U.S. 1, 17, 36 S.Ct. 684, 15 L.Ed.2d 545, 556 (1966). Left open is the question of precisely what is required to demonstrate that such differences have, in fact, been determined. Is it sufficient for the courts, with no findings of fact or other analyses, to merely state in their opinions that comparison has been made? Or must the claims themselves be examined as carefully as the prior art, followed by appropriate findings, or by at least some indication, which spells out the court's understanding of the differences and similarities?

The answers to these questions become self-evident from the following observation by this Court in *Altoona Publix Theatres, Inc. v. American Tri-Ergon Corporation*, 294 U.S. 477, 487, 55 S.Ct. 455, 79 L.Ed. 1005, 1012 (1935):

The Court of Appeals, in upholding the patent, made no examination of its separate claims, but treated the patent throughout as though it were a combination of five distinct elements, the photoelectric cell, the arcuate flexing of the film, the flywheel, and the flexible connection of the flywheel and the optical slit, although nowhere in the patent is any such combina-

tion claimed. The patent thus upheld is one which was neither claimed nor granted.

That error therein discovered by this Court on review (failure to examine the separate claims) is no less evident in the opinion of the District Court in this case and magnified by total absence of treatment in the decision of the Court of Appeals. Appropriate directions to the courts in line with *Altoona* as to what is required to comply with the three point test of *Graham*, is direly needed.

As stated in *Altoona*, "under the statute it is the claims of the patent which define the invention \* \* \* and each claim must stand or fall, as itself sufficiently defining the invention, independently of the others." (294 U.S. 477, 487, 79 L.Ed. 1005, 1012). Application of these age old doctrines to the opinion of *Graham* by specific mandate at this time will avoid sweeping validation or invalidation of patents without a clear indication of which claims were actually examined and understood by the courts, and how each was treated in relation to the prior art.

As stated by Judge Hand in *Reiner v. I. Leon Co.*, 285 F.2d 501, 503 (2nd Cir. 1960), virtually all inventions consist of combinations of old elements, the sole issue being patentability of the new assemblage. The drift of the 1952 Patent Act, according to Judge Hand, was to remove the hostility toward patents and to provide a statutory command in lieu of judicial gloss. Ignoring the claims and merely reciting, one by one, old elements found in the prior art runs counter to these concepts.

It also runs counter to § 103 which requires inquiry into the "subject matter as a whole" rather than individual elements. Too few courts emphasize this requirement as carefully as in *Reeves Instrument Corp. v. Beckman Instruments, Inc.*, 444 F.2d 263, 270, 271 (9th Cir. 1971),

recognizing also that nothing would be patentable if novelty of the combination of the claims in their entireties is to be disregarded. Virtually all patent claims are made up of a combination of elements each of which can easily be found to be individually old and each of which can be analyzed for "function" in the prior art such as to result in invalidity contentions notwithstanding the novelty, the new and unexpected results and the nonobviousness of the combination.

That is to say, should the courts be permitted to continue in their confusion with the belief that, all combination claims are likely to cover a mere catalog of old, separate, uncooperative elements as in the famous pencil-eraser "aggregation" case? *Reckendorfer v. Faber*, 92 U.S. 347, 23 L.Ed. 719 (1876). Or, should it now be clarified, once again, that the test is not whether or not the aggregation argument is perhaps available with respect to all inventions? *B.G. Corporation v. Walter Kidde & Co.*, 79 F.2d 20, 22 (2nd Cir. 1935).

The questions are of special significance here, considering the fact that the DePuy Wagon, for example, taught away from the claimed inventions. Examination of the claims shows that the wagon, even if properly considered as prior art, taught how to *not* make a large haystack and was a mere invitation to experimentation. No rule of law could possibly be established which would permit that type of prior event to be used positively as a relevant teaching combined with other references to support obviousness, coupled with treatment of the patented inventions as if they relate to mere aggregation of elements precisely as in the invention of a pencil with an eraser.

In summary, we submit that this Court must now make it abundantly clear that the purpose of § 103 is to eliminate

determination of patentability by picking one element from one patent or publication and picking another element out of another patent or publication and so on, thereby using individual elements of the prior art to build up a theoretical, composite machine or method with no consideration given to the combinations of the claims at issue.

### CONCLUSION

When due consideration is given to the improper statutory and legal standards applied in the opinions below, doubts as to the correctness of the decisions become manifest. The issues of patentability herein presented for review must be regarded as of exceptional importance, particularly in view of the unusual value of the patented inventions to the public from the standpoint of economy in food production. If this petition is granted and the decision of the Court of Appeals is reversed, the impact and practical results of the holding will be the resolution of several conflicts of opinion in extremely troublesome areas such as to cause serious adverse effects upon uniform determination of the validity of patent claims among the courts.

Respectfully submitted,

GORDON D. SCHMIDT  
 WARREN N. WILLIAMS  
 1400 Mercantile Tower  
 1101 Walnut Street  
 Kansas City, Missouri 64106

*Counsel for Petitioner*

### APPENDIX

IN THE UNITED STATES DISTRICT COURT  
 FOR THE DISTRICT OF UTAH  
 CENTRAL DIVISION

C 299-73

DEERE & COMPANY,  
 Plaintiff,

v.

HESSTON CORPORATION,  
 Defendant.

### JUDGMENT

(Filed May 4, 1977)

The court in the above-entitled matter, having heretofore entered its findings of fact and conclusions of law, herewith enters its order and judgment based thereon.

IT IS HEREBY ORDERED, ADJUDGED, AND DECREED as follows:

1. The court enters its order and judgment denying the plaintiff's request for declaratory judgment that the four major patents in issue were obtained by the defendant's purported fraud on the Patent Office; and

2. The court enters its order and judgment granting the plaintiff's request for a declaratory judgment that the patents in issue are invalid for failure to satisfy the statutory requirements for patentability of 35 U.S.C. §§ 102(b), 103 (1970).

Dated May 3, 1977.

/s/ Aldon J. Anderson  
 Aldon J. Anderson  
 United States District Judge

IN THE UNITED STATES DISTRICT COURT  
FOR THE DISTRICT OF UTAH  
CENTRAL DIVISION

C 299-73

DEERE & COMPANY,  
Plaintiff,

v.

HESSTON CORPORATION,  
Defendant.

**MEMORANDUM OPINION IN LIEU OF FINDINGS  
OF FACT AND CONCLUSIONS OF LAW  
UNDER RULE 52**

(Filed May 4, 1977)

For Plaintiff: Dennis McCarthy, Rand L. Cook, 141 East First South, Salt Lake City, Utah 84111; Dugald S. McDougall, Theodore R. Scott, 135 South LaSalle Street, Chicago, Illinois 60603.

For Defendant: William T. Thurman, McKay, Burton, McMurray & Thurman, 500 Kennecott Building, Salt Lake City, Utah 84133; Gordon D. Schmidt, Warren N. Williams, Schmidt, Johnson, Hovey & Williams, 1800 Federal Reserve Bank Building, 925 Grand Avenue, Kansas City, Missouri 64106.

The plaintiff, Deere & Company ("Deere"), filed this action under 28 U.S.C. § 2201 (1970) for a declaratory judgment that the defendant's eight patents in issue<sup>1</sup> were invalid and that the plaintiff was not, therefore, liable for

1. While the original complaint sought a declaratory judgment on only two of the major patents, Hesston counterclaimed on eight additional patents of which two design patents were withdrawn before trial; eight patents presently remain in issue.

infringing these patents. The defendant, Hesston Corporation ("Hesston"), counterclaimed for damages and alleged that Deere had infringed Hesston's validly issued and enforceable patents. The court held trial beginning May 10, 1976, and the parties finally submitted the matter to the court following a post-trial hearing on January 28, 1977.

*I. Patents in Issue and Background*

The eight patents and the relevant claims in issue are as follows:

- (1) Garrison Patent No. 3,556,327 (hereinafter referred to as "Garrison I patent") directed to a *haystacking machine*, which is essentially protected in claims 1, 2, 6, and 7 of that patent;
- (2) Garrison Patent No. 3,847,072 (hereinafter referred to as "Garrison II patent") directed to a *haystacking method*, which is essentially protected in claims 1, 3, 4, and 7 of that patent;
- (3) Lundahl Patent No. 3,728,849 (hereinafter referred to as "Lundahl I patent") directed to a *method for making haystacks*, which is essentially protected in claims 1, 2, 7, and 9 of that patent;
- (4) Lundahl Patent No. 3,828,535 (hereinafter referred to as "Lundahl II patent") directed to a *haystacking machine*, which is essentially protected in claims 1, 10, 11, 12, and 13 of that patent;
- (5) Adee Patent No. 3,878,670 (hereinafter referred to as "the '670 patent") directed to a *press-controlled deflector*, which is an improvement on the *haystacking machine* and is essentially protected in claims 9, 10, 11, and 12 of that patent;

(6) White Patent No. 3,899,966 (hereinafter referred to as "the '966 patent") directed to improving the hay-stacking machine by using the press-actuating power cylinders to open and close the tailgate, which improvement is essentially protected in claims 5, 6, and 7 of that patent;

(7) Brooks-McDaniel Patent No. 3,757,687 (hereinafter referred to as "the '687 patent") directed to an improvement of the press-actuating mechanism, which is essentially protected in claims 4, 5, 6, 7, 8, and 10 of that patent; and

(8) Anderson Patent No. 3,842,732 (hereinafter referred to as "the '732 patent") directed to a further improvement of the tailgate actuating mechanism, which is essentially protected in claims 1, 2, 5, 7, and 10 of that patent.

The parties' dispute mainly centers on the Lundahl I, II and Garrison I, II patents: For this reason, the court hereafter will frequently refer to these patents collectively as "the four major patents in issue."

The relevant background to these patents reveals that in the early 1960's, Cordell Lundahl (doing business with his father Ezra C. Lundahl as Ezra C. Lundahl, Inc.) began to build and test a machine designed to compress loose hay into a large, dense, weather-resistant haystack. Cordell Lundahl's first stacking wagon had high side walls and a false front which was used to compress the hay at appropriate intervals as the hay collected against the closed rear doors of the wagon. In addition to the horizontal compaction against the rear doors, the hay was compacted vertically by means of two swingable, gate-like presses to form the top of the stack. To enhance the structural integrity of the haystack as it was being formed in the wagon, Cordell Lundahl added supplemental com-

pressors to the underside of the gate-like presses to increase the vertical compression of the hay. This Lundahl hay-stacking wagon, unlike later prototypes, did not have an integrated means for picking up the hay from the field windrow, elevating the hay, or spreading the hay evenly in the wagon. Rather, the hay was deposited in the wagon by means of a tractor-operated pitchfork called a "Farm-hand."

Ezra C. Lundahl, Inc., in the February 3, 1966, issue of the *Montana Farmer-Stockman*, advertised a "one man automatic feeding system for long hay" that would "also stack and compress loose hay from the windrow." As a result of this advertisement, Ezra C. Lundahl, Inc., sold a haystacking wagon to DePuy Enterprises, Inc., on July 1, 1966 (hereinafter referred to as "the DePuy machine"). The DePuy machine was used during the 1966 haying season and for at least part of the 1967 haying season. In 1968, DePuy Enterprises, Inc., filed suit for damages for breach of warranty against Ezra C. Lundahl, Inc., due to certain mechanical failures in the DePuy machine that had developed during use. Ezra C. Lundahl, Inc., settled the lawsuit by paying the plaintiffs \$2,999. The DePuy machine was thereafter abandoned for haystacking purposes.

Hesston acquired the assets of Ezra C. Lundahl, Inc., on August 1, 1966, and continued the development of the haystacking machine. Hesston transferred an engineer, Keith Garrison, to Logan, Utah to complete and to reduce to practice a haystacking wagon based on Cordell Lundahl's original concepts. Lundahl and Garrison completed the development of a prototype haystacking machine in December, 1966. The prototype was then field tested in Arizona and Florida during early 1967. This prototype embodied pressing components, a hay pickup device, an elevator,

a structure to spread the hay evenly in the wagon, a tailgate that opened to unload the formed stack, and a device to push the formed stack out of the wagon onto the ground.

On June 1, 1967, Garrison returned to Hesston's Kansas headquarters to design a haystacking wagon for commercial manufacture that was to be "functionally equivalent although structurally different" from the Lundahl haystacking wagon. (Hesston's Main Brief at 89). As Hesston admits, "manufacture of the Garrison machine infringes the claims of the Lundahl patents" (Hesston's Main Brief at 89), but Hesston has paid Lundahl for such infringement. Garrison's haystacking machine improved certain features of the earlier Lundahl wagon and was reduced to practice in the fall of 1968.

Hesston authorized its attorney to begin preparing patent applications on both the Lundahl and Garrison machines on September 5, 1968. Hesston filed the initial Garrison patent application with the Patent Office on April 14, 1969. Hesston filed the initial Lundahl patent application with the Patent Office on November 14, 1969, although Lundahl's haystacking wagon concept and development antedated that of Garrison.

In applying for the Garrison I patent, Hesston did not refer to the prototype Lundahl haystacking wagons on which Garrison had worked to improve and to reduce to practice a haystacking machine originally conceived by Lundahl. The Garrison I patent application matured on January 19, 1971, and is now in issue in this lawsuit. By filing a "divisional application" on October 23, 1970, Hesston sought to secure a patent on method claims for making haystacks. The patent examiner initially rejected all the method claims as unpatentable over prior art. De-

spite Hesston's rewritten and resubmitted method claims, the patent examiner again rejected the divisional application and cited as grounds for such rejection the Sutherland British patent:

"Sutherland shows a harvester which advances across a field, picks up crop, conveys it to a chamber and lowers a press on the crop. Applicant's recited method differs from Sutherland in the exact type of conveying, i.e., the use of a blower conveyor. This feature is, however, shown to be old by Bayerische Pf. in the same environment and a mere substitution of equivalents exists."

Hesston thereafter abandoned the divisional application.

Hesston filed a continuation application on April 16, 1973. The Patent Office allowed the claims in the continuation application and the Garrison II patent now in issue matured on November 12, 1974.

On March 9, 1972, the patent examiner rejected the Lundahl patent application, filed November 14, 1969, on the ground that the claims therein were "clearly anticipated by Garrison." On October 4, 1972, Ezra C. Lundahl filed an affidavit under Rule 131, 37 C.F.R. §1.131 (1976), "swearing back" of the Garrison application. This procedure overcame the prior art reference to the Garrison I patent. However, in pursuing the Lundahl I patent application, Hesston did not disclose to the patent examiner the existence or the sale of the DePuy machine. The Lundahl patent application matured into a patent on April 24, 1973.

On February 7, 1973, Hesston filed a "divisional application" to secure the machine claims on the Lundahl haystacking wagon. The patent examiner initially rejected this divisional application in light of the prior Garrison

I patent. By reference to the 131 Affidavit of Ezra C. Lundahl, Hesston overcame the Garrison I patent as a prior art reference. On February 19, 1974, the patent examiner allowed some claims, but rejected other claims as unpatentable over the Sutherland British patent in view of the Bayerische reference. Hesston filed an amendment dated April 1, 1974, in which it stated that:

"The Claims in this case were prepared and submitted on the basis of a rather full and comprehensive knowledge of voluminous prior art, including the three (3) references herein referred to by the Examiner. The key to Claims 15-30 lies in Lines 11-13 of Claim 24 and is directed to a concept that is simply not contemplated by any prior disclosure known to applicant.

Never before has any one clearly come up with the idea of using a press other than to carry out its normal function of material compressing. More particularly, it is absolutely new to provide a hay gathering or collection feature in a press as its initial function in cooperation with the main crop receiving body."

The patent examiner subsequently allowed the claims and the Lundahl II patent was issued on August 13, 1974.

The factual summary to this point is relevant to the issue of patent validity and enforceability. The court need not narrate the facts relevant to Hesston's infringement counterclaims at this point. Deere raises two issues, based on these facts, that are relevant to patent validity and enforceability which the court must analyze before proceeding to the infringement issue.

First, Deere contends that the four major patents in issue are unenforceable since they were allegedly obtained

through Hesston's fraud on the Patent Office. Secondly, Deere contends that notwithstanding the fraud issue, the patents in issue are invalid because they fail to satisfy the standards of patentability set forth in 35 U.S.C. §§ 102(b), 103 (1970).

## II. Fraud on the Patent Office

Deere contends that Hesston perpetrated a fraud on the Patent Office by failing to disclose: (1) during the course of the applications for the Garrison I and II patents, the prior art taught to Garrison by the earlier Lundahl prototype haystacking wagon tested in Arizona and Florida, on which Garrison merely contributed mechanical improvements to Lundahl's original concept; and (2) during the course of the applications for the Lundahl I and II patents, the development and sale of the DePuy machine, which Deere contends is prior art on the Lundahl I and II patents.

In *Kingsland v. Dorsey*, 338 U.S. 318 (1949), the United States Supreme Court, adopting the language of the Patent Commissioner, set forth the standard of conduct required of counsel practising before the Patent Office:

"By reason of the nature of an application for patent, the relationship of attorneys to the Patent Office requires the highest degree of candor and good faith. In its relation to applicants, the Office . . . must rely upon their integrity and deal with them in a spirit of trust and confidence . . . ."

*Id.* at 319 (emphasis added). Accord *Precision Instrument Manufacturing Co. v. Automotive Maintenance Machinery Co.*, 324 U.S. 806, 818 (1945). The policy supporting this standard of conduct is "[t]he far-reaching social and economic consequences of a patent . . . [that] give the public

a paramount interest in seeing that patent monopolies spring from backgrounds free from fraud or other inequitable conduct and that such monopolies are kept within their legitimate scope." *Id.* at 816.

To establish that the patent is invalid or unenforceable, Deere must establish by clear and convincing evidence that Hesston procured the four major patents in issue by fraud. *McCullough Tool Co. v. Well Surveys, Inc.*, 343 F.2d 381, 394 (10th Cir. 1965). To constitute fraud on the Patent Office, Deere must prove that Hesston's nondisclosure was material, i.e., that the Patent Office would have rejected Hesston's four major patent applications *but for* Hesston's fraudulent conduct in not disclosing the earlier Lundahl haystacking wagons. *See Norton v. Curtiss*, 433 F.2d 779, 795 (C.C.P.A. 1970). On the present state of the record and based on the court's subsequent analysis herein of the prior art, including the earlier Lundahl haystacking wagons, Deere has not proven by clear and convincing evidence that the Patent Office would have rejected the four major patents in issue *but for* the allegedly fraudulent nondisclosure.

Deere must also prove by clear and convincing evidence that Hesston's conduct before the Patent Office in not disclosing the prior Lundahl haystacking wagons during the applications for the four major patents in issue constituted willful, intentional, or wrongful conduct, *Tokyo Shibaura Electric Co. v. Zenith Radio Corp.*, 404 F. Supp. 547, 569 (D. Del. 1975); *In Re Frost Patent*, 398 F. Supp. 1353, 1366 (D. Del. 1975), or that Hesston's conduct was "so extreme as to be described as recklessness or gross negligence." *Turzillo v. P&Z Mergentime*, 532 F.2d 1393, 1400 (D.C. Cir. 1976). In *Walker Process Equipment, Inc. v. Food Machinery & Chemical Corp.*, 382 U.S. 172 (1965), the Court distinguished patents procured by "in-

tentional fraud," which would strip the patentee of its antitrust exemption, from "technical fraud," which would not render the patent invalid so long as the patentee made "an honest mistake as to the effect of prior [art] upon patentability." *Id.* at 177. *See Xerox Corp. v. Dennison Manufacturing Co.*, 322 F. Supp. 963, 968-69 (S.D.N.Y. 1971) (allowed patent applicant "the right to exercise good faith judgment in deciding what matters are and are not of sufficient relevance and materiality to require disclosure.").

Based on the present state of the record, the court concludes that the evidence is insufficient to impute to Hesston and its attorneys a fraudulent intent or gross and reckless conduct that would justify a finding of patent invalidity due to a purported fraud on the Patent Office. Hesston and its attorneys exercised good faith judgment on whether to include the prior Lundahl wagons as prior art in the Lundahl I, II and Garrison I, II patent applications. That good faith judgment, based on a strict notion of the scope of the intended patent in reference to the prior art, though erroneous, will not render the patent invalid. The court, therefore, denies Deere a declaratory judgment that the four major patents in issue are invalid due to Hesston's alleged fraud on the Patent Office.

### III. Patentability

Deere seeks a declaratory judgment that the patents in issue are invalid as being unpatentable over the prior art. The determination of patentability must begin with the source of congressional authority to define and to limit patents. The Constitution grants Congress the power "[t]o promote the Progress of Science and the useful Arts, by securing for limited Times to . . . Inventors the exclusive right to . . . their Discoveries." *U.S. Const.*

art. I, § 8, cl. 8. The statutory and case precedent have interpreted this constitutional provision to require three elements of patentability; utility, novelty, and nonobviousness.

Prior to the passage of the Patent Act of 1952, the two basic statutory requirements for patentability were that the device must be "new and useful." Act of Feb. 21, 1793, ch. 11, 1 Stat. 318. In *Hotchkiss v. Greenwood*, 52 U.S. (11 How.) 248 (1851), the Supreme Court defined "new" to include what in effect became a third test of patentability; to be patentable a device must demonstrate "skill and ingenuity" beyond that possessed by "the skillful mechanic." *Id.* at 267. *Hotchkiss*, therefore, required that the device be an "invention" to be patentable.

The courts narrowly interpreted this standard of invention. For example, in *Cuno Engineering Corp. v. Automatic Devices Corp.*, 314 U.S. 84, 91 (1941), the Court required that "the new device, however useful it may be, must reveal the flash of creative genius, not merely the skill of the calling." See also *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 154-55 (1950) (device must be a "distinctive contribution to scientific knowledge") (Douglas, J., concurring). This standard of invention prior to the Patent Act of 1952 has been severely criticized for failing to provide an objective, practical standard for determining patentability. See generally Rich, *Principles of Patentability*, 28 Geo. W.L. Rev. 393 (1960).

The Patent Act of 1952 reenacted the "new and useful" formula of patentability by refining the definitions of novelty and utility. 35 U.S.C. §§ 101, 102 (1970). Congress also sought to remedy the lack of a practical standard embodied in the invention test of *Hotchkiss* by introducing into section 103 the objective standard of nonobviousness.

As the Court explained in *Graham v. John Deere Co.*, 383 U.S. 1, 14 (1966) (emphasis added):

"The first sentence of [section 103] is strongly reminiscent of the language in *Hotchkiss*. Both formulations place emphasis on the pertinent art existing at the time the invention was made and both are implicitly tied to advances in that art. The major distinction, is that Congress has emphasized 'nonobviousness' as the operative test of the section, rather than the less definite 'invention' language of *Hotchkiss* that Congress thought had led to 'a large variety' of expressions in decisions and writings."

The Court also interpreted § 103 as abolishing the test phrased as "flash of creative genius" used in *Cuno Engineering Corp. v. Automatic Devices Corp.*, *supra*. 383 U.S. at 15 & n.7.

To summarize, the present standards of patentability, which the court implements to determine whether Hesston's eight patents in issue are in fact patentable, are utility under § 101, novelty under § 102, and nonobviousness under § 103. Deere does not challenge the Hesston patents on the ground that they are not useful. The court, therefore, presumes, and the evidence supports the conclusion, that Hesston has satisfied the requirements of patentability under § 101.

#### A. Nonobviousness Under Section 103

The Supreme Court in *Graham v. John Deere Co.*, *supra*, set forth the basic factual inquiries to consider in determining patent validity under § 103:

"Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and

the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy."

383 U.S. at 18-19. The Supreme Court has continued to apply the three-pronged *Graham* test of patentability under § 103. See *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 280 (1976); *Dann v. Johnston*, 425 U.S. 219, 230 (1976).

#### *The Prior Art*

To demonstrate that the Hesston patents are obvious and thus unpatentable, Deere cites the following prior art references:

(1) Hale Patent No. 371,314 (Oct. 1887) that describes a hay-cocking machine the main function of which was to gather "scattered hay or other fodder up from a field and [discharge] the fodder to the ground in compact piles or cocks for protection against storms." To summarize claims 1 through 4 of the Hale Patent, the hay-cocking machine gathered the hay from the ground, elevated the hay into an open bin, provided a "flexible distribution reciprocating back and forth over the open top," and a hinged bottom to drop the hay "cock" on the ground.

(2) Isom Patent No. 1,272,666 (July 1918) that describes a mechanical hay shocker. Claim 1 of the Isom patent sufficiently sets forth the mechanics of the hay shocker as they are relevant to the present facts:

"A mechanical hay shocker comprising in combination a hopper, delivering means discharging into the hopper, tamping members within the hopper, a draper forming the bottom of the hopper, and means whereby the delivery means may be stopped, the tamping member operated, the doors opened and the draper started in motion in the order named."

(3) Sutherland British Patent No. 951,698 (1964) describing a harvesting machine with the purpose "to provide an improved construction of hay harvesting machine by which the hay can be compressed to form a stack and then deposited on the ground." The Sutherland British patent was the patent examiner's prior art reference for initially rejecting the Garrison II patent application. The Sutherland British patent clearly teaches vertical compression of the hay to form a stack as set forth in Claim 1 of that patent:

"A machine for harvesting hay comprising a wheeled trailer which can be hitched to a tractor, a compression chamber mounted on the trailer and into which the hay can be charged, said chamber being open at the top and having a rear wall which can be opened, and a hydraulically operated compression member by which the hay introduced into the chamber can be compressed to form a stack which can then be ejected from the chamber when the rear wall is opened."

Of particular significance to the Hesston patents are lines 48-60 on page 1 of the Sutherland British patent which describes the compression member of the patent and its use not only to compress the hay, but to form a "ridged top to the stack."

(4) Murphy Patent No. 517,930 (April 1894) describes an improvement on a baling press to open and close automatically the baling chamber by connecting rods and linkage to the press mechanism. Deere cites Murphy as prior art to the '966 patent in the details of the tailgate latching and unlatching mechanism as it works in cooperation with the press actuating power cylinders.

(5) Hill Patent No. 1,164,519 (Dec. 1915) describes a device to compress further cotton that has already been baled by using steam power and a series of "gear-toothed racks" connected to rocking levers. Deere cites Hill as prior art to the '687 patent insofar as Hill teaches the use of intermeshing gear teeth in combination with links and levers to equalize the forces at each corner of a four-cornered press.

(6) Lohry Patent No. 2,230,756 (Feb. 1941) describes a system to actuate automatically automobile windows through a series of gears. Though factually not analogous, Deere cites Lohry as prior art to the '687 patent as teaching the use of intermeshing gear teeth in a mechanical fashion similar to that contained in the Hill patent as it refers to the '687 patent.

(7) Clark Patent No. 3,186,448 (June 1965) describes a device for compressing tobacco into a hogshead by deflecting the flow of tobacco to even distribution in the container wherein the tobacco is then compacted. Deere cites Clark as prior art to the '670 patent. Deere contends that the '670 patent uses a linkage connected to a single power cylinder which is similar in function to the Clark patent to adjust the crop deflector while raising and lowering the press.

(8) Lundahl Super-60 Forage Harvester which Deere cites as an example of an equivalent device for elevating

hay into the bin through a blower-type loader rather than through an endless belt elevator, which represents the different methods of elevating hay between the Garrison and Lundahl patents. The forage harvester is merely an example of an old machine and method for elevating crops which Garrison incorporated into his broad combination to achieve an allegedly patentable result.

(9) Hesston's South African Patent No. 71/5017 that Deere cites, among other foreign patents, as prior art to the '732 patent. Hesston, at page 67 of its Main Brief, tacitly admits that the South African patent reads on the American '732 patent, but argues that the disclosures in the South African patent were not such prior art as to preclude the issuance of the patent since the patent examiner considering the '732 patent had cited and thus knew of the South African patent when he allowed the '732 patent claims.

Deere cites the DePuy machine as prior art to the Lundahl I and II patents. While the DePuy machine does not contain certain mechanical features that were ultimately incorporated into the Lundahl wagons, such as hay pickup, elevation, and spreading devices, the court concludes that the DePuy machine taught several concepts that were eventually embodied in the Lundahl I and II patents. The DePuy machine utilized not only horizontal compaction, but also compressed the hay vertically, though to a limited extent, through the use of the gate-like presses and supplemental compressors. The DePuy machine also contained a false front used to slide the finished stack onto the ground through a tailgate that would open and tilt to allow the stack to slide out of the wagon.

Hesston contends that the DePuy machine was not prior art because it lacked the other devices that picked up, elevated, and spread the hay. In addition, Hesston contends that the DePuy machine utilized gate-like presses

that swung in a curvilinear path rather than applying pressure from a perfectly vertical direction; that is, pressure applied along a line perpendicular to the plane. The DePuy machine, however, taught the concept of using vertical compression, though directed from other than a 90 degree angle, to compact the hay to enhance the structural integrity of the haystack and to form a surface on the top of the stack that would be weather-resistant. When the patent applicant seeks a patent on a combination of old elements, the applicant cannot eliminate any one of the old elements from consideration as prior art merely because any one individual old element does not include certain portions or all of the combination of elements.

Deere also cites the 1966-67 Lundahl prototype hay-stacking wagon, on which Garrison and Lundahl combined their efforts, as prior art to the Garrison I and II patents. Deere contends that the prototype taught the basic mechanical concepts embodied in the DePuy machine and attempted to add a mechanism to allow "on-the-go" haystacking. Hesston contends that the prototype wagon with its "pelican beaks" constituted merely an abandoned, unsuccessful experiment. Based upon the court's determination that the DePuy machine was prior art, the 1966-67 Lundahl prototype, as an attempted improvement on the DePuy machine, is a *fortiori* prior art to the Garrison patents. The 1966-67 prototype haystacking wagon taught the essential concepts of vertical compression which had been embodied in the earlier DePuy machine as well as the prior art bearing upon pick up, elevation, even distribution, compaction, and discharge as more particularly described in the Hale, Isom, and Sutherland patents. As such, the 1966-67 prototype was prior art to the Garrison patents and Garrison should have disclosed that prior art in the processing of his patent application.

To determine the difference existing between the prior art and the Lundahl I, II and Garrison I, II patents, the court here sets forth what those patents claim. The essential claims at issue in the Lundahl I and II patents, which claim machine and method, disclose that the "hay loader" described therein had the following functions: (1) to pick up the hay crop from the field, (2) to elevate the crop to a position where it could be deposited in the bed of the wagon, (3) to spread the crop evenly in the wagon bed, (4) to use a press structure to confine the hay in the wagon, (5) to use a power press to compact the hay crop vertically at intervals as it accumulated in the wagon bed, and (6) to discharge the finish stack on the ground.

The essential claims at issue in the Garrison I and II patents, which claim machine and method, disclose that the "loose hay wagon" described therein had the following functions: (1) to pick up the hay crop from the field, (2) to elevate the crop to a position over the wagon bed by means of a blower-type loader, (3) to blow the hay into the wagon bed and spread the hay evenly in the bed as it is blown, and (4) to compress vertically the hay at intervals as it is deposited in the wagon bed.

The functions of the four minor patents in issue have already been described hereinabove in relation to Deere's prior art references. The basic function of these four minor patents has also been described in the introductory material to this decision and will not be repeated at this point.

#### *Obviousness of the Differences*

Hesston argues that its patents combine old elements into a device that produces a new and advantageous result. The prior art cited by Deere and by the patent examiners clearly reveals that each element of the Hesston combina-

tion patents and the four minor patents was disclosed in earlier patents. The Hale and Isom patents, for example, taught picking up hay from the field and elevating it into a confining chamber. Hale also taught even distribution through a device over the open bin that reciprocated back and forth. The Isom and Sutherland British patents respectively taught the use of a "tamping member" and a vertical compression chamber.

The Tenth Circuit, in *McCullough Tool Co. v. Well Surveys, Inc.*, 343 F.2d 381, 393 (10th Cir. 1965), set forth the test for determining when a combination of old elements would constitute a patentable device:

"It is universally held that a mere aggregation of a number of old parts or elements which, in the aggregation, perform or produce no new or different function or operation than previously performed or produced by them, is not a patentable invention. . . . The test of whether a particular patent is a mere aggregation and invalid or a combination and valid has been variously stated. Generally, where elements old in the art are united in such a way that a new and useful result is secured or an old result is attained in a more facile, economical and efficient manner, there is a patentable combination."

The Tenth Circuit recently reaffirmed this test of patentability for combination patents in *Moore v. Schultz*, 491 F.2d 294, 299 (10th Cir.), cert. denied, 419 U.S. 930 (1974).

In *Rutter v. Williams*, 541 F.2d 878 (10th Cir. 1976), the court denied patent validity to a patent combining old elements on the basis of two recent Supreme Court decisions in *Dann v. Johnston*, 425 U.S. 219 (1976), and *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273 (1976). The court in *Rutter* followed the test whether the combination pro-

duced a "new and different function." 541 F.2d at 881. Based upon *Rutter*, a combination patent must produce a synergistic result to be patentable and valid; that is, the result achieved by the patent is unexpected when the individual old elements are considered individually by one skilled in the art.

In *Dann v. Johnston*, *supra*, the Court reversed the Court of Customs and Patent Appeals because the differences between the prior art and the purported inventions were obvious to one reasonably skilled in the art. As the Court explained:

"[T]he mere existence of differences between the prior art and invention does not establish the invention's nonobviousness. The gap between the prior art and the respondent's system is simply not so great as to render the system nonobvious to one reasonably skilled in the art."

425 U.S. at 230. Similarly in *Sakraida v. Ag Pro, Inc.*, *supra*, the water flush system to remove cow manure from barns "simply arranges old elements with each performing the same function it had been known to perform, although perhaps producing a more striking result than in previous combinations." *Id.* at 282.

While conceding that the patents in issue represent combinations of old elements, Hesston argues that the patentable, nonobvious difference between the prior art and Hesston's claimed patents is in the use of vertical compression to form a weather-resistant stack that is structurally durable while preserving hay quality. Hesston relies heavily upon "secondary considerations" under the *Graham* test to demonstrate nonobviousness and patentability such as economic success, widespread acceptance of the device by farmers, and reduction to practice of a workable ma-

chine after several frustrating failures. These "secondary considerations" alone, however, are insufficient to overcome the necessary conclusion of obviousness or nonobviousness based on the three-pronged *Graham* analysis. See *Timely Products Corp. v. Arron*, 523 F.2d 288, 294 (2d Cir. 1975).

Having determined the scope and content of the prior art and the differences between the prior art and the purported patentable devices, the court now proceeds to consider whether such differences are obvious to one reasonably skilled in the art. The court approaches this question mindful of the need to avoid using hindsight to determine obviousness, but considers the issue in light of the knowledge available to one reasonably skilled in the art at the time the patents in issue were sought. See *Graham v. John Deere Co.*, *supra* at 36.

To apply the third prong of the *Graham* test and determine what would be obvious to a person reasonably skilled in the art, the Court in *Dann v. Johnston*, *supra*, explained this prong of the *Graham* test as follows:

"In the context of the subject matter of the instant case, it can be assumed that such a hypothetical person would have been aware both of the nature of the extensive use of data processing systems in the banking industry and of the system encompassed in the *Dirks* patent. While computer technology is an exploding one, '[i]t is but an even handed application to require that those persons granted the benefit of a patent monopoly be charged with an awareness' of that technology."

425 U.S. at 230 (citing *Graham v. John Deere Co.*, *supra* at 19). Accord *Rutter v. Williams*, *supra* at 881 (applied *Dann* requirement that "one granted the benefit of a patent

monopoly is charged with an awareness of the existing technology"). As stated in *Application of Winslow*, 365 F.2d 1017, 1020 (C.C.P.A. 1966):

"We think the proper way to apply the 103 obviousness test to a case like this is to first picture the inventor as working in his shop with the prior art references—which he is presumed to know—hanging on the walls around him."

In determining patentability of Hesston's combination patents, the court has duly weighed the admonition of the Supreme Court in *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Co.*, 340 U.S. 147, 152-53 (1950) that:

"Courts should scrutinize combination patent claims with a care proportioned to the difficulty and improbability of finding invention in an assembly of old elements. . . . A patent for a combination which only unites old elements with no change in their respective functions . . . obviously withdraws what already is known into the field of its monopoly and diminishes the resources available to skillful men."

The Court recently reaffirmed this admonition on combination patents in *Sakraida v. Ag Pro, Inc.*, *supra* at 281.

In light of the scope and content of the prior art of which one reasonably skilled in the art is presumably aware, the difference claimed in the Hesston patents in issue would be obvious to one reasonably skilled in the art. Hesston's patents do not achieve a synergistic result (see, e.g., *United States v. Adams*, 383 U.S. 39 (1966)), that would be nonobvious to one reasonably skilled in the art. While Hesston's patents certainly demonstrate the work of a skilled mechanic, the differences between these patents

and the prior art do not achieve a nonobvious, patentable difference. The Hesston patents have combined old elements that continue to function in the same capacity as they did outside Hesston's combinations, and they do not perform a new and different function even though Hesston wagons succeeded in producing a striking result by combining the old elements.

*B. Novelty Under Section 102(b)*

The Lundahl and Garrison patents are also unpatentable for failure to meet the requirements of § 102(b) in light of the sale of the DePuy machine. While the court has decided that the elements of fraud on the Patent Office are not present in this action, particularly the intentional failure to disclose prior art, the court nevertheless has concluded that the DePuy machine constituted prior art that had been sold more than one year prior to the Lundahl and Garrison patent applications. Section 102(b) states:

"A person shall be entitled to a patent unless—

      . . . . .  
 (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of the application for patent in the United States . . . ."

The court has carefully and thoroughly examined the exhibits bearing upon this issue and has weighed the facts in light of the legal principles presented by counsel. The court has determined that the DePuy machine was prior art in teaching haystacking concepts and techniques that were eventually improved and refined in the Lundahl and

Garrison patents. Hesston, Lundahl, and Garrison were fully familiar with the DePuy machine and with its possible implications for subsequent patent applications. Nevertheless, the Lundahl and Garrison patent applications were filed more than one year after the sale of the DePuy machine.

The record does not support Hesston's contention that the DePuy machine fell within the experimental use exception initially formulated in *City of Elizabeth v. American Nicholson Pavement Co.*, 97 U.S. 126, 134 (1877), that "public use" in the patent statutes does not include "use of an invention by the inventor himself, or of any other person under his direction, by way of experiment, and in order to bring the invention to perfection . . . ." The advertisement and sale of the DePuy machine did not contain "an express or clearly implied condition that the sale or offering is made primarily for experimental use." *Robbins Co. v. Lawrence Manufacturing Co.*, 482 F.2d 426, 433 (9th Cir. 1973). *Accord Dart Industries, Inc. v. E.I. DuPont de Nemours & Co.*, 489 F.2d 1359, 1366 & n.13 (7th Cir. 1973), cert. denied, 417 U.S. 933 (1974). The court, therefore, holds that § 102(b) renders the Garrison and Lundahl patents unpatentable in light of the sale of the DePuy machine more than one year prior to the filing of the patent applications, which placed the concepts embodied therein into the public domain.

The court does not reach the issue of patent infringement since that issue is moot in light of the court's determination that the Hesston patents are invalid under § 103 and § 102(b).

Wherefore, the court enters judgment declaring that the Hesston patents in issue are unpatentable over prior art since they are obvious under § 103 and the DePuy ma-

chine was prior art in the public domain more than one year prior to the patent applications for the Garrison and Lundahl patents.

DATED this 3 day of May, 1977.

/s/ Aldon J. Anderson  
Aldon J. Anderson  
United States District Judge

UNITED STATES COURT OF APPEALS  
TENTH CIRCUIT

Nos. 77-1561 and 77-1562

DEERE & COMPANY,  
Plaintiff-Appellee and Cross-Appellant,  
v.

HESSTON CORPORATION,  
Defendant-Appellant and Cross-Appellee.

Appeal from the United States District Court for the District of Utah, Central Division (D.C. No. C 299-73)

(Filed March 9, 1979)

Dugald S. McDougall, Chicago, Illinois (Dennis McCarthy and Rand L. Cook, Salt Lake City, Utah, and Theodore R. Scott, Chicago, Illinois, on the brief), for Plaintiff-Appellee and Cross-Appellant.

Gordon D. Schmidt of Schmidt, Johnson, Hovey & Williams, Kansas City, Missouri, for Defendant-Appellant and Cross-Appellee.

Before HOLLOWAY and DOYLE, Circuit Judges, and STANLEY,\* Senior District Judge.

DOYLE, Circuit Judge.

I. THE PLEADINGS AND PROCEEDINGS

Plaintiff-appellee Deere & Company instituted this action in the United States District Court for the District of Utah. A declaratory judgment to declare certain patents invalid was prayed for against the Hesston Corporation of Hesston, Kansas, the owner of United States Patent No. 3,556,327, entitled "Loose Hay Wagon," issued January 19, 1971, and filed by Harold Keith Garrison April 14, 1969; also, United States Patent No. 3,728,849, entitled "Hay Loader," issued April 24, 1973, on application filed November 14, 1969, by Ezra Cordell Lundahl.

From further allegations in the complaint it appears that Deere has designed and built a hay wagon, has exhibited it and offered it for sale at meetings of farm implement dealers, and is now manufacturing and selling in competition with a hay wagon manufactured and sold by Hesston, named StakHand.

It is further alleged that Hesston notified Deere that it considered the Deere implement to have infringed on both the Garrison and Lundahl Patents. Deere maintains in furtherance of its complaint that the Hesston and Lundahl Patents are invalid and so not infringed; also, it maintains that the Garrison and Lundahl Patents were obtained through fraud on the Patent Office and that they are invalid because of the sale of a prototype of the hay loader in the Lundahl Patent.

\*Of the District of Kansas, sitting by designation.

The answer on behalf of the defendant-appellant denies the allegations as to the invalidity, fraud and prior sale of a prototype and contains a counterclaim alleging infringement. A supplemental counterclaim lists a series of Hesston Patents. These include those mentioned above together with improvement patents.<sup>1</sup>

Plaintiff-appellee Deere has filed a reply to the fourth supplemental counterclaim as a result of which all matters are fully in issue.

This matter was tried to the court before United States District Judge Anderson, District of Utah, who ruled all eight patents of Hesston Corporation invalid under 35 U.S.C. § 102(b) and 35 U.S.C. § 103. The district court essentially ruled that the patents in issue were invalid for obviousness as provided in 35 U.S.C. § 103 and known to the public for more than one year before the patent application under § 102(b).

The trial court said that the controversy centered around four patents: Lundahl Patent No. 3,728,849, a haystacking method; Lundahl Patent No. 3,828,535, a haystacking machine (Lundahl I Patent and Lundahl II Patent, respectively). The other two primarily involved are the

1. The numbers, names and dates of issue are as follows:

Number	Title	Patented
3,556,327	Loose Hay Wagon	January 19, 1971
3,728,849	Hay Loader	April 24, 1973
3,757,687	Press Mechanism for Stacking Implements	September 11, 1973
3,828,535	Hay Loader	August 13, 1974
3,842,732	Tailgate Control for Stackers	October 22, 1974
3,847,072	Loose Hay Wagon	November 12, 1974
3,878,670	Stack Forming Loader	April 22, 1975
3,899,966	Machine for Loading, Stacking and Unloading Crops	August 19, 1975

Garrison Patent No. 3,556,327, a haystacking machine, and the Garrison Patent No. 3,847,072, a haystacking method (the Garrison I Patent and Garrison II Patent, respectively).

II.

HISTORY AND BACKGROUND

This controversy had its origins in 1960 and the years following.

The Lundahls, Cordell and Ezra, son and father respectively, were engaged in the manufacture of loose hay wagons. Cordell, the son, saw the need for a machine that would transform loose hay into closely packed haystacks which could either be left in the field or moved to a storage place.

Lundahl's first machine was a simple wagon which compressed the hay. It was loaded by a machine known as a Farmhand grapple fork or a Farmhand. This latter was pulled by a tractor through the hay field where it would pick up loose hay and deposit it into the wagon. This wagon had high side walls and a front panel which moved toward the rear and in so doing compacted the hay against the rear doors. Lundahl discovered that this mechanism loaded the hay unevenly and without a uniform density. The result was disintegration of the hay stack. There were other deficiencies. The loading was a separate function; there was a lack of integrated method of pulling the wagon down the windrow. The operation was in two separate steps, in other words. After the loading there followed the horizontal compaction which was also in stages. Each time some hay was loaded it had to be compressed and then more hay would be added and compressed until the wagon was filled. While producing one

complete haystack, this process resulted in a stack which tended to separate and fall apart. To overcome this, Lundahl added vertical compression units consisting of two gate-like top presses which would be set as extensions of the side walls and would swing down from the top on hinges powered by hydraulic compressors. Notwithstanding this, though, the principal compression was the horizontal force created by compressing the crop against the back walls of the wagon.

In February 1966, Lundahl advertised in a farm journal a one-man automatic feeding system for long hay. While the advertisement said that the machine would stack and compress loose hay from the windrow into neat uniform stacks without any manual handling, at this time an integrated system had not been developed: The wagon still had to be loaded separately. One Warren DePuy purchased one of these incomplete machines. It lacked the attachment which would make the machine self-loading. This was promised at a later date. This is here referred to as the DePuy machine and it was put to use during the 1966 haying season and for part of the 1967 season, but had mechanical difficulties as a result of which DePuy sued the Lundahl Corporation for breach of warranty. After this the machine was abandoned by DePuy.

In 1966, the Hesston Corporation, defendant-appellant here, bought the assets of the Lundahl Corporation.<sup>2</sup> Hesston was very much interested in the stacking machine idea and pursued it through one of the engineers for Hesston, Keith Garrison, who worked with Cordell Lundahl on improving the design. Prior to this, Lundahl had come to the realization that vertical compaction was desirable. This led to the development of the swinging top-gates

2. A brief description of the Hesston Corporation is set forth in Appendix I.

which came down on the loaded haywagon and also the addition of the tuckers to the undersides of the hinged gates on the earlier prototype. So the research was pursued along the line of developing the vertical compaction. Testing along this line continued through 1968 with several prototypes, including a 1966-67 prototype with redesigned top-presser gates integrated with a crop pick-up and distribution system. Eventually Garrison came up with a method of continuous loading of hay into a moving wagon by using the blower duct system with a dispersal mechanism which served to spread the hay evenly. Garrison also discarded the two-gate approach and adopted a single unit, described as an inverted U, which is used to apply downward pressure. These innovations were said to have produced "real good" results which yielded stacks of uniform density and having a self-supporting nature. Also, the stacks were better shaped from the standpoint of shedding water. This machine was ultimately marketed.

Hesston, in the year 1969, commenced the production of the StakHand 60, which made six ton stacks. Some smaller editions or models were added later, such as the StakHand 30, for forming three ton stacks, and the StakHand 10, which produced a one ton stack. Improved models were identified with an "A" after the number.

Deere and Company started selling machines which made one ton stacks, three ton stacks and six ton stacks, all of which appeared to be based on the same design as the Hesston machine. This activity produced the present controversy.

The application for patent on the Garrison I was filed in 1969. It matured January 19, 1971.

At the very outset the Garrison II Patent was rejected on the basis of prior art. The Patent Office ruled that Garrison II was the same as the Sutherland British

Patent, the only difference being its blower conveyor. After this, Hesston offered an amendment claiming that it was not based on any prior art and saying that "it is absolutely new to provide a hay gathering or collection feature in a press as its initial function in cooperation with the main crop receiving body." The Patent was finally issued August 13, 1974.

The Lundahl Patents I and II suffered somewhat the same fate. Lundahl I was filed in 1969 and rejected in 1972. The rejection was based on the prior issuance of Garrison I. Lundahl, by swearing back, established that he had completed his invention prior to the date the Garrison I Patent was filed. The application was accepted and the patent matured in 1973.

The Lundahl II, which was also based on the Garrison I, was rejected by the examiner. Again, this objection was overcome by swearing back, but ultimately some but not all of the claims were allowed.

These four described patents, together with four so-called minor patents, were all ruled invalid, and basically these rulings are the issues for consideration on this appeal.

### III.

#### THE JUDGMENT OF THE TRIAL COURT

Judge Anderson's opinion, which is published in 456 F. Supp. 520 (D. Utah 1977), constitutes thorough and careful workmanship, and in writing this opinion we have made full use of it. The opinion considers the following issues:

##### A. Fraud on the Patent Office.

The contention of plaintiff-appellee Deere that fraud was perpetrated on the Patent Office.

B. The patentability of the Garrison, Lundahl and improvement patents. Included was the nonobviousness under § 103, and prior sale or use under § 102(b).

Essentially the contention of fraud perpetrated on the Patent Office is predicated on Hesston's failure to disclose in the application for the Garrison I and II Patents the prior art contained in the Lundahl prototype haystacking wagon which was merely mechanically improved by Lundahl originally, and also the failure to disclose in the Lundahl I and II proceedings the sale and development of the DePuy machine.

The trial court pointed out that under McCullough Tool Co. v. Well Surveys, Inc., 343 F.2d 381, 394 (10th Cir. 1965), Deere had the burden of establishing the obtaining of the four main patents by the use of fraud. Here the form of the fraud was nondisclosure and it would have to appear that the Patent Office would have rejected the Hesston application but for the fraudulent nondisclosure. See Norton v. Curtiss, 433 F.2d 779, 795 (C.C.P.A. 1970). The trial judge was not convinced that the Patent Office would have rejected the four major patents but for the nondisclosure, nor was the court able to conclude that there was any willful, intentional, wrongful or even reckless conduct in the failure to disclose. The court concluded as follows:

Based on the present state of the record, the court concludes that the evidence is insufficient to impute to Hesston and its attorneys a fraudulent intent or gross and reckless conduct that would justify a finding of patent invalidity due to a purported fraud on the Patent Office. Hesston and its attorneys exercised good faith judgment on whether to include the prior

Lundahl wagons as prior art in the Lundahl I, II and Garrison I, II patent applications. That good faith judgment, based on a strict notion of the scope of the intended patent in reference to the prior art, though erroneous, will not render the patent invalid. The court, therefore, denies Deere a declaratory judgment that the four major patents in issue are invalid due to Hesston's alleged fraud on the Patent Office.

On the question of invalidity of the patent as having been unpatentable under the prior art, the trial court reviewed the history of the particular provision noting that prior to the Patent Act of 1952, the requirements were that the device was to be "new and useful." Cited was Hotchkiss v. Greenwood, 52 U.S. (11 How.) 248 (1851), where the Supreme Court in defining the term "new" stated that "to be patentable a device must demonstrate 'skill and ingenuity' beyond that possessed by 'the skillful mechanic.'"

The 1952 Act, the court pointed out, reenacted the "new and useful" formula of patentability in the form of the terms novelty and utility in place of the requirement of the invention test by introducing nonobviousness.

The trial court concluded that the standards for determining patentability of the Hesston's Patents were, then, utility, novelty and nonobviousness. The court also concluded that Deere had not seriously challenged the patents as not having utility.

## IV.

WHETHER THE DETERMINATION BY THE TRIAL COURT THAT THE PATENTS FAIL FOR OBVIOUSNESS IS SUPPORTED BY THE FACTS AND THE LAW OF THE CASE<sup>3</sup>

The trial court relied on the case of *Graham v. John Deere Co.*, 383 U.S. 1 (1966). Obviousness under § 103, it was said in *John Deere*, is to be determined in the light of the prior art by studying the differences between the prior art and the claims at issue and by resolving the level of ordinary skill in the pertinent art. Against this background the obviousness or nonobviousness of the subject matter is determined. The Court, in *John Deere*, said that "Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented." 383 U.S. at 18-19. These could not, however, substitute for lack of invention.

In subsequent cases the Supreme Court has continued to apply the *Graham* test of patentability under § 103. The more important of the Supreme Court cases on the subject are *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 280 (1976), and *Dann v. Johnston*, 425 U.S. 219, 230 (1976).

The court then goes on to consider the Hale, Isom and Sutherland Patents cited as prior art by Deere. Hale dates back to 1887 and describes a hay-cocking machine, the main function of which was to gather hay or other fodder up from a field and discharge the fodder to the

---

3. Appended to the opinion is a discussion of the operation of the Lundahl and Garrison machines. We hope that it will provide a better understanding of the functions of the patents in suit.

ground in compact piles or cocks for protection against storms. It sounds familiar. The Hale claims 1 through 4 state that the machine gathered the hay from the ground, elevated it into an open bin, provided distribution reciprocating back and forth over the open top together with a hinged bottom to drop the hay "cock" on the ground.

The Isom Patent, which is dated in July 1918, describes a mechanical hay shocker which, in combination, comprised a hopper, delivery means discharging into the hopper, tamping members within the hopper, a draper forming the bottom of the hopper and a facility for stopping the delivery means. The tamping member operated, the doors opened, and the draper started in motion.

The Sutherland Patent described a harvesting machine which provided an improved construction and a method by which the hay can be compressed to form a stack and then deposited on the ground. This Sutherland Patent, dated in 1964, was the examiner's prior art reference for rejection of the Garrison II Patent application. This British patent was said by the trial court to clearly teach vertical compression of the hay to form a stack. Sutherland had a wheeled trailer attached to a tractor with a compression chamber mounted on the trailer into which hay could be "charged," the chamber being open at the top and having a rear wall which could be opened, and a hydraulically operated compression member by which the hay introduced into the chamber could be compressed so as to form a stack which could then be ejected from the chamber when the rear wall was opened.

A number of other prior art patents were cited, particularly the DePuy machine and the Lundahl prototype from which Garrison and Lundahl worked in order to perfect the vertical compression as well as pickup, elevation, even distribution, compaction and discharge.

*McCullough Tool Co. v. Well Surveys, Inc.*, 343 F.2d 381, 393 (10th Cir. 1965), articulated a somewhat liberal test governing an aggregation of old parts so as to produce a patentable invention. The opinion said:

The test of whether a particular patent is a mere aggregation and invalid or a combination and valid has been variously stated. Generally, where elements old in the art are united in such a way that a new and useful result is secured or an old result is attained in a more facile, economical and efficient manner, there is a patentable combination. *Bewal, Inc. v. Minnesota Mining and Mfg. Co.*, 10 Cir., 292 F.2d 159; *Oliver United Filters v. Silver*, 10 Cir., 206 F.2d 658, cert. denied, 346 U.S. 923, 74 S.Ct. 308, 98 L.Ed. 416.

343 F.2d at 393.

It is noteworthy that this court also said, just prior to the above quote, that:

It is universally held that a mere aggregation of a number of old parts or elements which, in the aggregation, perform or produce no new or different function or operation than previously performed or produced by them, is not a patentable invention. *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147, 71 S.Ct. 127, 95 L.Ed. 162; *Admiral Corporation v. Zenith Radio Corp.*, 10 Cir., 296 F.2d 708; *Consolidated Electro. Corp. v. Midwestern Instruments*, 10 Cir. 260 F.2d 811.

343 F.2d at 393.

It would appear that the Supreme Court has recognized in *Dann v. Johnston*, 425 U.S. 219 (1976), that commercial success and failure of others may be relevant in determining obviousness or nonobviousness. However, the

Supreme Court in *Dann v. Johnston, supra*; *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273 (1976); and *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp.*, 340 U.S. 147 (1950), also emphasized that commercial success without invention does not suffice. In *Sakraida*, the invention, a system to flush cow manure from barn floors, was held to be obvious. In *Dann v. Johnston, supra*, a computer system which provided recordkeeping for bank checks and deposits coded into categories by the bank customer was not patentable because it was obvious. The point was also made in *Sakraida* that in order for the combination of old elements to prevail, there must be a synergistic effect, that is, an effect greater than the sum of the several effects taken separately. The trial court was mindful of the Supreme Court's admonition in *Great Atlantic & Pacific Tea Co. v. Supermarket Equipment Corp., supra*, that courts should scrutinize a combination of patent claims with care proportioned to the difficulty and improbability of finding an invention in an assembly of old elements. The patent is supposed to add to the sum of useful knowledge, the Supreme Court said, and patents are not to be sustained when their effect is to subtract from former resources freely available to skilled artisans. The trial court was cognizant of this in determining whether the differences were obvious to one reasonably skilled in the art, pointing out that one who makes such an invention is charged with awareness of the existing technology.

The trial court was not incorrect, as we view it, in its holding that the Hesston Patents did not achieve a synergistic result that would be nonobvious to one reasonably skilled in the art. On the contrary, the court concluded that Hesston's Patents demonstrated the work of a skilled mechanic, the difference being that these patents do not achieve a nonobvious patentable difference from the prior

art since they have combined old elements which continue to function as they did previously. The old elements do not in combination perform a new and different function even though the wagons did succeed in producing a striking result by combining the old elements.

In our view, the strongest point in Hesston's case rests in its contention that a new and different result, which realized great commercial success, flowed from the combination of the old elements and that this overcomes the argument that the result was invalid for obviousness. Nevertheless, we must disagree with Hesston's position. It is our conclusion, as indicated above, that the trial judge correctly appraised the prior art and the combination in the light of the commercial success of the patents.

The issue in question has given us pause and concern, but we are in a less favorable position than was the trial court in terms of making the present evaluations.

The other issues determined by the trial court, which we have described in detail, fraud on the Patent Office and prior sale or use under § 102(b), are supported by the evidence. Although we have examined them for possible plain error, none is perceived.

One further matter which we deem it necessary to consider is whether the trial court erred, as Deere contends, in denying the request for lawyers' fees. Here again, our disposition is to accept the finding and conclusion of the trial court, which was not convinced that this was an extraordinary case, whereby Deere would be entitled to fees. After all, Hesston was the patentee in this case and it surely had the right to litigate without being assessed Deere's attorneys' fees, in the absence of any extraordinary actions, like fraud, by Hesston.

The judgment of the district court is affirmed.

## APPENDIX I

The Hesston Corporation, of Hesston, Kansas, is a rapidly growing corporation which primarily manufactures farming and industrial equipment. In the past ten years it has grown nearly tenfold. In fiscal 1966, Hesston reported net sales of \$25,466,000, a net income of \$1,148,000, and total assets of \$13,440,000. In fiscal 1975, it reported net sales of \$207,857,000, a net income of \$9,572,000, and assets totaling \$161,641,000. In the same period the number of persons it employed rose from an average of 1,050 to an average of 4,581.

By way of comparison, in fiscal 1975 Deere & Company reported net sales of \$2,955,204,000, a net income of \$179,-073,000 and total assets listed at \$2,440,829,000. At the close of 1975 Deere had 53,794 employees.

Both companies produce a wide range of products in general categories which include farm equipment, industrial equipment, and office and consumer products. Both operate in the United States and abroad. As an example of the level of diversity of these two corporations, Deere makes machines ranging from snowmobiles and lawn tractors to heavy duty graders, large tractors, and combines. Hesston also has a wide range of products. It makes, *inter alia*, back-hoes, waste disposal units (compactors, incinerators, etc.), snowblowers, harvestors, office furnishings, and of course, windrowers and stack forming machines.

Hesston's largest division is farm equipment which, in 1975, accounted for 96% of Hesston's net sales. The hay stacking machines here at issue fall into this category. The hay handling equipment product line, in 1975, produced 37% of Hesston's net sales. This 37% is a figure which rose from 16% in 1971. Hesston's second leading product

line consists of windrowing machines, which, in 1975, accounted for 24% of Hesston's net sales.

Hesston is a corporation of global scope. It operates plants in France and Italy, has licensees in Australia, Argentina, and Brazil, and distributors throughout the world.

## APPENDIX II

## OPERATION OF THE LUNDAHL AND GARRISON MACHINES

*The Lundahl Machine.*

In this design, two parts, a loader and a compressing wagon, comprise the machine. The loader loads the hay from the windrow by a rotary pickup unit which has tynes or fingers rotating on a horizontal axis. This unit delivers the hay to an "endless" conveyor belt which elevates the crop. Neither aspect is particularly novel and the applicant notes this by providing that these elements may be powered in any suitable fashion.

The elevator unit consists of two parallel endless chains connected by cross slats. This unit inclines up toward the conveyor assembly which extends horizontally rearwards, from the elevator, and is located over the chamber in which the hay is to be dropped. An endless belt which runs up the elevator and over the conveyor actually carries the crop. At the back end of the conveyor is a roller which moves longitudinally back and forth and serves to disperse the hay to the front and rear of the chamber body.

The elevator/loader housing and the main body are connected in a pivotal fashion allowing the body to be shifted from side to side without shifting the loader. This allows the hay to be dispersed from side to side in the

wagon as the wagon is shifted. (This pivotal mechanism also permits better operation over uneven terrain by allowing the unit to twist on a longitudinal axis so that while the loader cants go the left the body lists to the right, and vice versa.)

The compression is achieved by the swingable gates, and tuckers attached thereto, which are a part of the main body. In the loading stage each gate is set in an upward position, as an extension of the side of the body, and aids in channeling hay from the conveyor into the body.

In the compression stage, the gates swing in and down, compressing the hay towards the floor. The tuckers add pressure to the hay near the walls. The resulting stack is packed and rounded on the top thus having the desirable quality of readily shedding moisture.

In unloading, the loader/elevator housing and the main body can be separated. This allows the operator to tow only the body to the unloading area. Offloading is accomplished by tilting the body down so that the rear rests on or near the ground, opening the tail gate, and pushing the stack by means of the false front.

#### *The Garrison Machine.*

In this machine the loading component is again housed at the front of the body. The crop is picked up by a drum rotating on a horizontal axis. The drum has projecting tynes which actually pick up the crop. The hay is then delivered to another rotating drum, placed superjacent to the pickup drum, which has retractable fingers which carry the crop. This latter device delivers the hay into the path of a fan. The fan, housed in a duct, blows the hay upward. The hay, channeled by the duct housing, is directed up and then back into the wagon.

The loading system moves laterally back and forth at all times during the loading thus causing the crop to be dispersed from side to side in the wagon. At the outlet of the duct is a deflector plate which the operator may cause to swing up and down, as the blower swings back and forth, allowing the hay to be distributed to the front and back of the receiving body. These two oscillating elements are calculated to produce even distribution of the crop in the body.

The body has, as an integral part, a press. The press consists of a pitched roof (one that slopes down from both sides of the longitudinal center line), sides, and a rear wall which also functions as a gate. When the press is raised, the body and the press form a closed chamber into which the hay is blown. When the chamber is full, i.e., when the hay reaches the blower outlet near the top and front of the body, the loading is halted and the press activated. The press descends vertically upon the mass of hay. This process is repeated until the wagon is full of pressed hay.

When the stack is ready to be offloaded, the press does not have to be raised as both the back wall of the main chamber and the back wall of the press open as gates. The gates are raised and the body tilted so that the rear rests on or near the ground. The wagon is pulled forward and, at the same time, the stack pushed back and out. This last maneuver is achieved by means of a push bar which is located at or near the front of the wagon, near the base, and runs from one side to the other. The bar is attached to chains which run the length of the body and, when engaged, pull the bar towards the rear.

## APPENDIX III

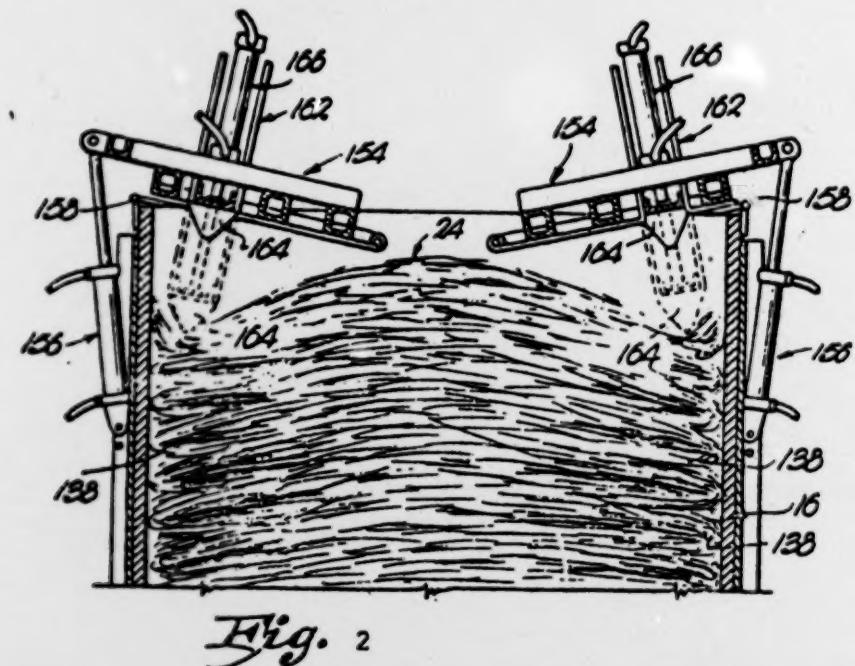
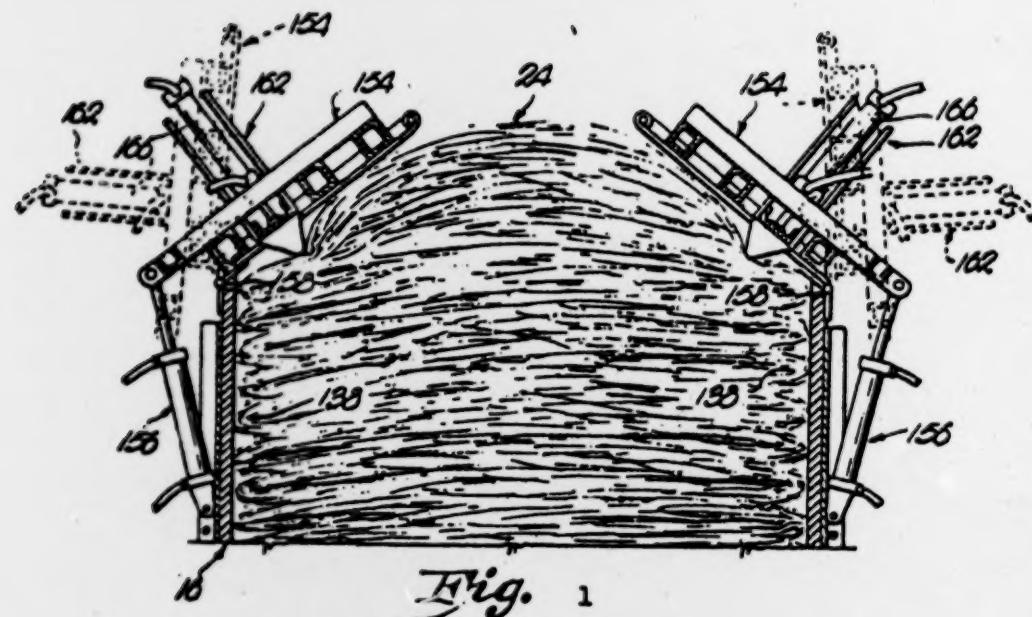
## DIAGRAMS OF THE LUNDAHL AND GARRISON MACHINES

Figures one and two portray the Lundahl machine in the compression stages. The view is from the rear. In figure one the side gates are swinging down to press the hay. In figure two the gates are down and the manner in which the "tuckers" compress the crop near the side walls of the wagon is shown.

Figures three and four are side depictions of the Garrison machine. In figure three the press is raised for loading. In figure four the press has been lowered to form the stack.

Figure five shows the Garrison machine from the rear, figure six the front. One can see, in figure five, the sloping characteristics of the press roof. In figure six the blower/elevator loading apparatus can be seen. The fashion in which the duct oscillates from side to side is also shown.

3.828,535



A46

-3-

3,847,072

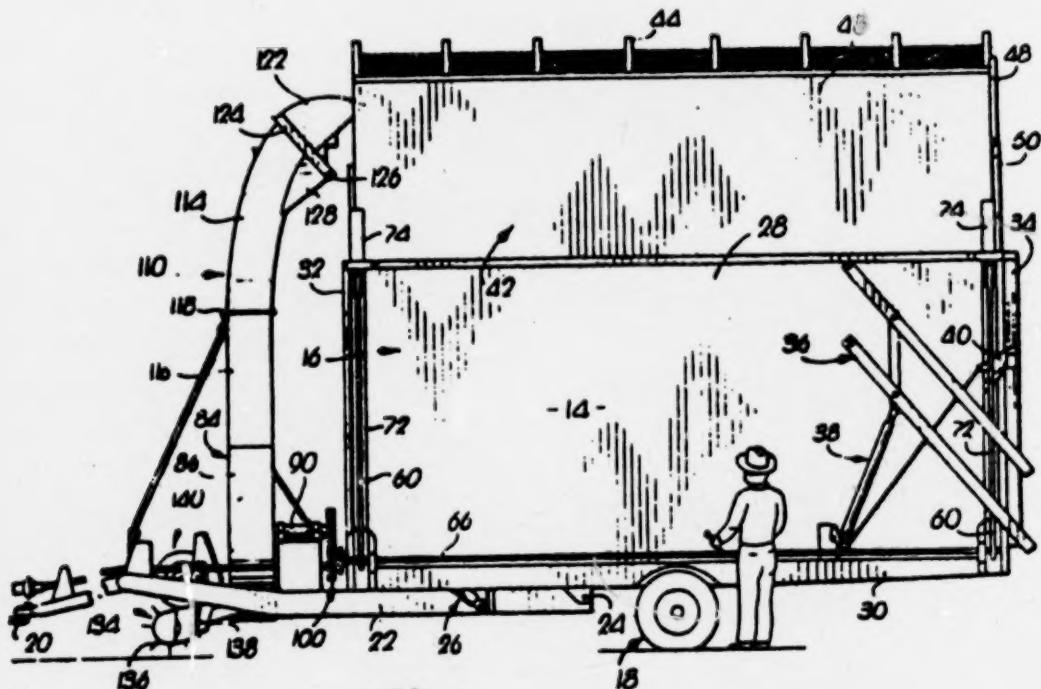


Fig. 3

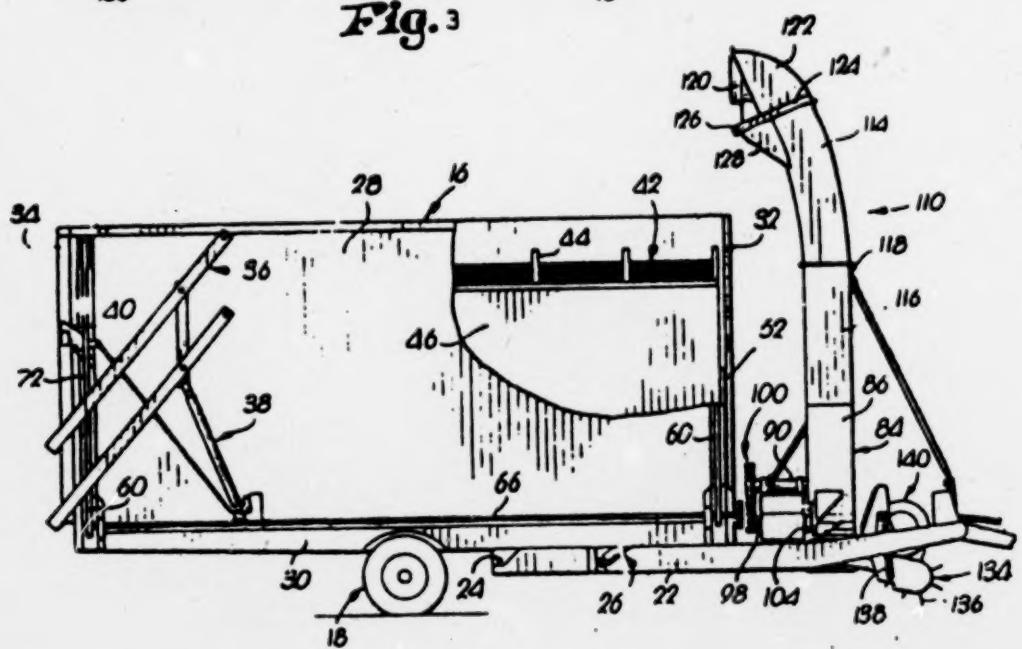


Fig. 4

A47

-4-

3,847,072

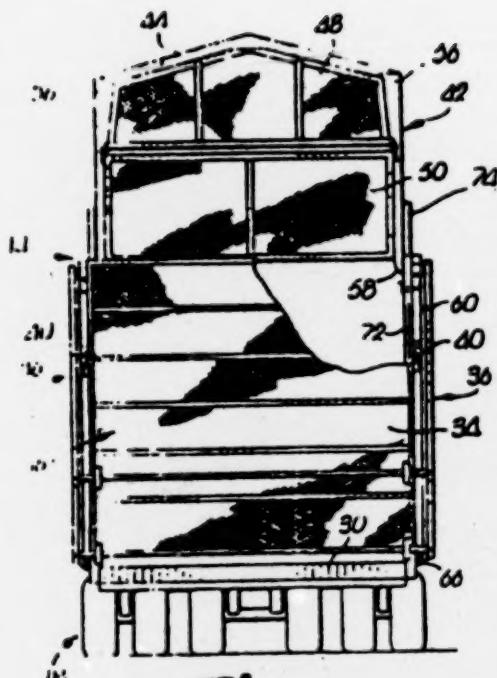


Fig. 5

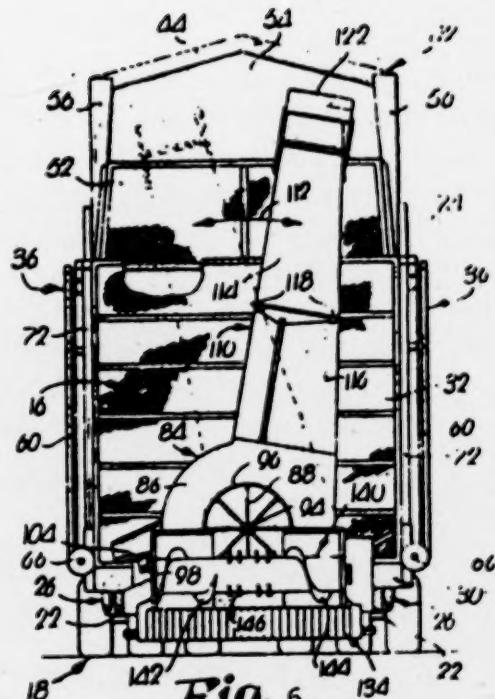


Fig. 6

UNITED STATES COURT OF APPEALS  
FOR THE TENTH CIRCUIT

JANUARY TERM - March 9, 1979

Before Honorable William J. Holloway, Jr., Honorable William E. Doyle, Circuit Judges, and Honorable Arthur J. Stanley, Jr., District Judge

No. 77-1561 and No. 77-1562

(D.C. No. C-299-73)

DEERE & COMPANY,

Plaintiff-Appellee-  
Cross-Appellant,

vs.

HESSTON CORPORATION,

Defendant-Appellant-  
Cross-Appellee.

**JUDGMENT**

This cause came on to be heard on the record on appeal from the United States District Court for the District of Utah, and was argued by counsel.

Upon consideration whereof, it is ordered that the judgment of that court is affirmed.

A true copy

Teste

Howard K. Phillips, Clerk

By: /s/ Robert L. Hoecker  
Robert L. Hoecker  
Chief Deputy

**PATENT CLAIMS AT ISSUE**

**3,828,535 (Lundahl)**

**CLAIM 1.** A harvesting machine including a vehicle adapted for advancement across a field having a crop thereon, said vehicle being provided with: a crop receiving body having a bed and a pair of spaced side walls extending upwardly from said bed; a crop pickup unit for lifting the crop off the field as the vehicle is advanced; an assembly including means disposed to receive the crop from said unit, direct the same to a level higher than the bed, and feed the crop into said body; and means for spreading the crop evenly throughout the body as the crop is fed thereinto, said body having structure normally disposed to cooperate with said side walls in confining said crop as the latter is fed into the body, said structure being shiftable with respect to said side walls downwardly toward said bed for compacting the crop from time to time in the body as the crop builds up therein to produce a stack conforming substantially in shape and size with the body.

**CLAIM 10.** A harvesting machine including a vehicle adapted for advancement across a field having a crop thereon, said vehicle being provided with: a crop receiving body having a bed and a pair of spaced side walls extending upwardly from said bed; a crop pickup unit for lifting the crop off the field as the vehicle is advanced; and an assembly including means disposed to receive the crop from said unit, direct the same to a level higher than the bed, and feed the crop into said body, said body having structure extending along and normally extending upwardly beyond the side walls to cooperate with said side walls in confining said crop as the latter is fed into the body, said structure being shiftable with respect to said

side walls downwardly toward said bed for compacting the crop from time to time in the body as the crop builds up therein to produce a stack conforming substantially in shape and size with the body.

CLAIM 11. The invention of claim 10; and power means on said body operably connected with said structure for shifting the latter.

CLAIM 12. The invention of claim 10, said structure, when in said normal disposition, extending upwardly beyond said side walls for receiving additional crop from the assembly after the crop has built up in the body to the top of the side walls.

CLAIM 13. The invention of claim 12, said structure overlying said additional crop and pressing downwardly thereon during compaction.

**3,728,849 (Lundahl)**

CLAIM 1. In a harvesting method, the steps of which include: advancing a vehicle provided with a crop-receiving body across a field having a crop thereon; continuously picking up the crop from the field as the vehicle is advanced; continuously raising the picked up crop to a level higher than the bed of the body as the crop is picked up; continuously feeding the raised crop into the body as the crop is raised; spreading the fed crop evenly throughout the body as the crop is fed; shifting a portion of said body which receives said crop downwardly toward said bed from time to time as the crop builds up in the body to compress the crop until a compact stack of the crop is produced, conforming substantially in shape and size with the body; transporting the vehicle with the stack in said body thereof to an unloading area; and unloading the stack from the body and depositing the same in an

upright position on a supporting surface at said area without materially disturbing the shape, size and compactness of the stack.

CLAIM 2. In the invention of claim 1 wherein said fed crop enters the body in a stream that is shifted from time to time fore and aft of said body.

CLAIM 7. In the invention of claim 1 wherein the picked up crop is raised to said level at one end of the body, is then transferred above the bed along a path extending fore and aft of the body, and is then fed by gravity into the body.

CLAIM 9. In the invention of claim 1 wherein the picked up crop is elevated vertically at the forwardmost end of the body to a level above the latter, is then horizontally conveyed rearwardly over the top of the body, and is then dropped vertically in a continuously gravitating stream into the body.

**3,556,327 (Garrison)**

CLAIM 1. A harvesting machine including a vehicle adapted for advancement across a field having a crop thereon, said vehicle being provided with: a crop receiving body; a pickup for lifting the crop off the field as the vehicle is advanced; apparatus disposed to receive the crop from the pickup and blow the same into said body; means for spreading the crop evenly throughout the body as the crop is blown thereinto; and a vertically reciprocal compressor mounted above the crop for compacting the crop from time to time in the body as the crop builds up therein to produce a stack conforming substantially in shape and size with the body.

CLAIM 2. The invention of claim 1 wherein said apparatus includes a rotary fan having an upright outlet

tube provided with a discharge disposed to direct the crop into the body.

CLAIM 6. The invention of claim 2 wherein said discharge is disposed to direct the crop into one end of the body and is provided with a shiftable deflector for controlling the loading of the crop fore and aft of the body.

CLAIM 7. The invention of claim 1 wherein said compressor comprises a top for said body that is carried by the body, the crop being blown into the body beneath the top when the latter is raised.

**3,847,072 (Garrison)**

CLAIM 1. The method of making a stack of hay which comprises the steps of: feeding a stream of loose hay into a collapsible container having a pair of sections of substantially identical sizes and configurations, including a hollow, open top body provided with a bed, and a normally elevated open bottom press having a crowned roof, each being additionally provided with opposed, upright side and end walls, the press being restricted to vertical, rectilinear reciprocation and being an upper extension of the body, aligned and in registered communication with the latter, when the press is elevated; placing as much of said hay into the container as can be held or practically contained by continuing said hay feeding step while the press is elevated until both the body and the press are filled with a loose mass of said hay; thereupon preforming said mass into the shape of a polygonal haystack by lowering the press into the body with a steady, continuous force sufficient to slip the press between the body and said mass to dispose the press over and around the mass, enclosing the latter within the press, surrounded by the side and end walls of the press, and confined between

said roof and said bed; and condensing said preformed mass into a compact stack of substantially uniform density throughout, molded to the internal configuration of the press, by continuing said steady press lowering force without interruption to inwardly compress the preformed mass simultaneously end to end thereof, laterally thereof and from top to bottom thereof prior to raising the press to its normally elevated position.

CLAIM 3. The method as claimed in claim 1; and the additional step of deflecting said hay stream up and down in the container while carrying out said feeding step to evenly distribute the hay end to end of the container.

CLAIM 4. The method of making a stack of hay which comprises the steps of: feeding a stream of loose hay into a collapsible container having a pair of sections of substantially identical sizes and configurations, including a hollow, open top body provided with a bed, and a normally elevated, open bottom press having a crowned roof, each being additionally provided with opposed, upright side and end walls, the press being restricted to vertical, rectilinear reciprocation and being an upper extension of the body, aligned and in registered communication with the latter, when the press is elevated, said feeding comprising the step of: blowing the hay into the press end to end of the latter above said body along the lower surface of said roof with a blast of air currents; exhausting the press of said air currents through the roof as the hay gravitates in the container toward said bed; placing as much of said hay into the container as can be held or practically contained by continuing said hay blowing and air exhausting steps while the press is elevated until both the body and the press are filled with a loose mass of said hay; thereupon preforming said mass into the shape

of a polygonal haystack by lowering the press into the body with a steady, continuous force sufficient to slip the press between the body and said mass to dispose the press over and around the mass, enclosing the latter within the press, surrounded by the side and end walls of the press, and confined between said roof and said bed; and condensing said preformed mass into a compact stack of substantially uniform density throughout, molded to the internal configuration of the press, by continuing said steady press lowering force without interruption to inwardly compress the preformed mass simultaneously end to end thereof, laterally thereof and from top to bottom thereof prior to raising the press to its normally elevated position.

CLAIM 7. The method as claimed in claim 4; and the additional step of deflecting said hay-laden air currents up and down to evenly distribute the gravitating hay end to end of the container.

**3,878,670 (Adee)**

CLAIM 9. In a stack forming implement: a mobile container defining a chamber for receiving crop to be formed into a stack; pickup and delivery means disposed adjacent said container and operable to direct a stream of projected crop into said chamber; mechanism for periodically compacting crop collecting in the chamber and including a compressor reciprocable vertically on the container; a shiftable deflector mounted for movement into and out of a position for deflecting the projected crop toward one part of the chamber; and structure coupled with said deflector and operable in response to actuation of said mechanism to effect said movement of the deflector when the compressor is disposed at a sufficient height to receive the crop stream therebeneath.

CLAIM 10. In a stack forming implement as claimed in claim 9, wherein said structure is inoperable to cause said movement of the deflector when the compressor is below said height.

CLAIM 11. In a stack forming implement as claimed in claim 10, wherein said deflector is provided with limit means for precluding further movement of the deflector beyond said crop deflecting position thereof when the compressor is below said height.

CLAIM 12. In a stack forming implement as claimed in claim 11, wherein said structure includes a cable connected to said deflector for lowering of the deflector into said position as the compressor is lowered, said limit means being disposed to relieve the load of the deflector from said cable when the compressor is below said height.

**3,899,966 (White)**

CLAIM 5. A stacker including: a container adapted to receive a crop to be stacked and provided with a shiftable endgate; compressor apparatus including vertically reciprocable press structure carried by the container for forming the crop in the container into a compact stack, said apparatus being selectively operable to control opening of the endgate as the structure is moved toward one end of its path of travel; a releaseable lock for retaining the endgate in a closed position; and mechanism for rendering said apparatus operable to release said lock prior to opening of the endgate as said structure is moved.

CLAIM 6. A stacker as claimed in claim 5, said mechanism including a member shiftable into said path of travel of said structure and engagable by the latter as it is moved toward said one end of its path of travel for selectively releasing the lock.

CLAIM 7. A stacker as claimed in claim 6, said lock including a latch pivotally mounted on the endgate, there being a pin secured to said container, said latch being engagable with the pin.

3,757,687 (Brooks, et al.)

CLAIM 4. In a stack forming implement: crop receiving structure including a hollow open top body having a pair of spaced, upright sides and a hollow open bottom press, reciprocable vertically in said body, said press being provided with a roof and with a pair of spaced, upright sides; and a pair of identical motion transmitting mechanisms one for each side respectively of the body exteriorly of the latter, each mechanism including: a pair of upright arms; shafts mounting said arms on the proximal side of said body for swinging movement within a common upright plane about horizontally spaced axes, means restraining the arms to swinging movement in unison, a pair of elongated links projecting above said sides of the body and disposed in a common upright plane, each link extending upwardly from a corresponding arm, horizontally spaced pivot pins remote from said shafts coupling the links at the lower ends thereof with their arms, horizontally spaced pivot pins at the upper ends of the links below the top of said roof coupling the same with the press for raising and lowering the latter in response to swinging of the arms, the shafts and the pins being normal to the path of reciprocation of the press, and power means for swinging the arms.

CLAIM 5. The invention of Claim 4, each power means comprising a fluid pressure piston and cylinder assembly.

CLAIM 6. The invention of claim 5, each assembly pivotally interconnecting the body and one of said arms.

CLAIM 7. The invention of Claim 4, each arm having a first upper end and a second end spaced from said first end, the shafts being adjacent said first ends, said links being coupled with the arms adjacent said second ends.

CLAIM 8. The invention of Claim 4, each arm having an end spaced from its shaft, said restraining means being between said ends of the arms.

CLAIM 10. The invention of Claim 4; and means for synchronizing said mechanisms.

3,842,732 (Anderson)

CLAIM 1. A stacker including: a container adapted to receive a crop to be stacked; apparatus including a reciprocable compressor associated with the container for periodically compacting the crop into a stack conforming substantially in size and shape with the container, said container having an open end through which the stack passes during unloading; a gate movable on said container into and out of closing relationship to said end; means releasably holding the gate in said closing relationship; and structure operably coupling said gate with said apparatus and shiftable during each acutation of the latter, said structure controlling movement of the gate only when said holding means is released.

CLAIM 2. A stacker as claimed in Claim 1, wherein said structure pulls on said gate during said movement of the latter.

CLAIM 5. A stacker as claimed in Claim 1, wherein said gate is provided with means automatically initiated movement of the gate out of said closing relationship when said holding means is released.

**CLAIM 7.** A stacker as claimed in Claim 1, wherein said apparatus includes drive mechanism for said compressor, said structure being connected at one end to said mechanism and at the opposite end to said gate.

**CLAIM 10.** A stacker including: a container adapted to receive a crop to be stacked; a reciprocable compressor associated with the container for periodically compacting the crop into a stack conforming substantially in size and shape with the container, said container having an open end through which the stack passes during unloading; mechanism for actuating the compressor; a gate movable on said container into and out of closing relationship to said end; means releasably holding the gate in said closing relationship; and structure linking said mechanism with the gate for controlling said movement of the gate when said holding means is released.

#### **MANUAL OF PATENT EXAMINING PROCEDURE**

##### **706 Rejection of Claims**

Although this part of the Manual explains the procedure in *rejecting* claims, the examiner should never overlook the importance of his role in *allowing* claims which properly define the invention.

37 CFR 1.106. *Rejection of claims.* (a) If the invention is not considered patentable, or not considered patentable as claimed, the claims, or those considered unpatentable will be rejected.

(b) In rejecting claims for want of novelty or for obviousness, the examiner must cite the best references at his command. When a reference is complex or shows

or describes inventions other than that claimed by the applicant, the particular part relied on must be designated as nearly as practicable. The pertinence of each reference, if not apparent, must be clearly explained and each rejected claim specified.

Patent examiners carry the responsibility of making sure that the standard of patentability enunciated by the Supreme Court and by the Congress is applied in *each and every case*. The Supreme Court in *Graham v. John Deere*, 148 USPQ 459 (decided February 21, 1966), stated that,

"Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy....

"This is not to say, however, that there will not be difficulties in applying the nonobviousness test. What is obvious is not a question upon which there is likely to be uniformity of thought in every given factual context. The difficulties, however, are comparable to those encountered daily by the courts in such frames of reference as negligence and scienter, and should be amenable to a case-by-case development. We believe that strict observance of the requirements laid down here will result in that uniformity and

definitiveness which Congress called for in the 1952 Act.

"While we have focused attention on the appropriate standard to be applied by the courts, it must be remembered that the primary responsibility for sifting out unpatentable material lies in the Patent Office. To await litigation is—for all practical purposes—to debilitate the patent system. We have observed a notorious difference between the standards applied by the Patent Office and by the courts. While many reasons can be adduced to explain the discrepancy, one may well be the free rein often exercised by examiners in their use of the concept of "invention." In this connection we note that the Patent Office is confronted with a most difficult task. . . . This is itself a compelling reason for the Commissioner to strictly adhere to the 1952 Act as interpreted here. This would, we believe, not only expedite disposition but bring about a closer concurrence between administrative and judicial precedent."

Accordingly, an application covering an invention of doubtful patentability should not be allowed, unless and until issues pertinent to such doubt have been raised and overcome in the course of examination and prosecution, since otherwise the resultant patent would not justify the statutory presumption of validity (35 U.S.C. 282), nor would it "strictly adhere" to the requirements laid down by Congress in the 1952 Act as interpreted by the Supreme Court.

Office policy has consistently been to follow *Graham v. John Deere Co.* in the consideration and determination of obviousness under 35 U.S.C. 103. As quoted above,

the three factual inquiries enunciated therein as a background for determining obviousness are briefly as follows:

1. Determination of the steps and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims in issue; and
3. Resolving the level of ordinary skill in the pertinent art.

The Supreme Court reaffirmed and relied upon the Graham three pronged test in its consideration and determination of obviousness in the fact situations presented in both the *Sakraida v. Ag Pro*, 189 USPQ 449 (decided April 20, 1976) and *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 163 USPQ 673 (decided December 8, 1969) decisions. In each case, the Court went on to discuss whether the claimed combinations produced a "new or different function" and a "synergistic result", but clearly decided whether the claimed inventions were unobvious on the basis of the three-way test in Graham. Nowhere in its decision in those cases does the Court state that the "new or different function" and "synergistic result" tests supersede a finding of unobviousness or obviousness under the Graham test.

Accordingly, examiners should apply the test for patentability under 35 U.S.C. 103 set forth in Graham. It should be noted that the Supreme Court's application of the Graham test to the fact circumstances in *Ag Pro* was somewhat stringent, as it was in *Black Rock*.

The standards of patentability applied in the examination of claims must be the same throughout the Office. In every art, whether it be considered "complex," "newly

developed," "crowded," or "competitive," all of the requirements for patentability (e.g., novelty, usefulness and unobviousness, as provided in 35 U.S.C. 101, 102, and 103) must be met before a claim is allowed. The mere fact that a claim recites in detail all of the features of an invention (i.e., is a "picture" claim) is never, in itself, justification for the allowance of such a claim.

When an application discloses patentable subject matter and it is apparent from the claims and the applicant's arguments that the claims are intended to be directed to such patentable subject matter, but the claims in their present form cannot be allowed because of defects in form or omission of a limitation, the examiner should not stop with a bare objection or rejection of the claims. The examiner's action should be constructive in nature and when possible he should offer a definite suggestion for correction.

If the examiner is satisfied after the search has been completed that patentable subject matter has been disclosed and the record indicates that the applicant intends to claim such subject matter, he may note in the Office action that certain aspects or features of the patentable invention have not been claimed and that if properly claimed such claims may be given favorable consideration.

UNITED STATES COURT OF APPEALS  
FOR THE NINTH CIRCUIT

---

No. 77-1718  
No. 77-2638

---

ARTHUR M. HERSCHEINSOHN and CORONA HAIR  
NET CORPORATION,  
Plaintiffs-Appellees

v.

ROBERT M. HOFFMAN, individually; ROBERT M. HOFFMAN, dba IMAGE PRODUCTS CO. and ADVANCED DESIGN LABORATORIES; HOFFMAN BEAUTY AND BARBER SUPPLY CO.; HOFFMAN BEAUTY AND BARBER SUPPLY CO., dba IMAGE PRODUCTS CO. and ADVANCED DESIGN LABORATORIES,  
Defendants-Appellants.

---

Appeal From the United States District Court for the  
Central District of California

**OPINION**

(Filed March 26, 1979)

Before: CARTER and WRIGHT, Circuit Judges, and CRAIG, District Judge.\*

CARTER, Circuit Judge:

This is an action for infringement of Patent No. 3,253,292 (hereafter No. 292), wherein the district court

---

\*Hon. Walter E. Craig, Chief U.S. District Judge, District of Arizona, sitting by designation.

entered a Judgment that the patent was valid and infringed and awarded damages. This is Appeal No. 77-1718.

Thereafter, a Judgment was entered holding defendants in contempt for offering to sell their devices during the period between the receipts of a Memorandum of Decision and the entry of Judgment for the plaintiffs. The appeal in this proceeding is No. 77-2638. We reverse both Judgments.

#### Facts

On May 15, 1964, Herschensohn, one of the plaintiffs herein, filed an application for letters-patent. The patent, No. 292, was issued on March 31, 1966.

Prior to 1971, plaintiffs sold a brush made from a flexible copolymer plastic with tufts of bristles, including 7 or 8 slender strands folded to form 14 to 16 bristles. Exhibit 3, in evidence, is an example of this brush. In 1971, the design was changed by the plaintiffs so that each tuft was formed from a single heavier monofilament folded to form two bristles, one longer than the other.

In 1974, the handle, spine and fingers were made from a plastic material which was less flexible than the original copolymer plastic material. Exhibit 2, in evidence, is an example of this second brush.

Defendants admittedly copied the latter brush, Exhibit 2, by having an organization in Hong Kong make the brushes and import them to the United States. They were literally "Chinese copies" of plaintiffs' second brush, Exhibit 2. Exhibit 5, in evidence, is an example of the defendants' alleged offending brush.

Patent No. 292 has four claims, of which #1, #3 and #4 are alleged to be infringed. Claim #1 is the only independent claim. Claims #3 and #4 are merely minor variations of Claim #1.

Claim #1 reads as follows:

1. In a hair brush of the character described, a handle, a brush back comprising a flexible spine element extending as a cantilever from said handle, a first series of closely spaced fingers extending laterally from one side and a second series of closely spaced fingers extending laterally from the opposite side of said spine element and tufts of relatively stiff bristles extending downwardly from at least the fingers of said brush back whereby when the brush is pulled through hair through which a comb can pass, said spine will bend so that the distal ends of the fingers on the trailing side of the brush will approach each other.

The appeals raise three questions:

1. The validity of the patent claims, #1, #3 and #4.
2. Whether the patent claims were infringed.
3. Was there a valid injunction in the Memorandum of Decision which can sustain the Contempt Judgment.

#### Validity

The patent sets forth a combination of old elements, four in number: a handle, a flexible spine, laterally extended fingers, and tufts of relatively stiff bristles. All of these elements are old in the art and no discussion of this art is necessary. The patent, therefore, is a combination patent and is controlled by the Supreme Court decisions on such patents. One of the latest such cases is *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273 (1976). There a unanimous Court reviewed the earlier cases and reversed the Fifth Circuit decision which had held the patent valid.

Congress in 1952 enacted 35 U.S.C. § 103, "as a codification of judicial precedents . . . with congressional directions that inquiries into the obviousness of the subject matter sought to be patented are a prerequisite to patentability." *Graham v. John Deere Co.*, 383 U.S. 1, 17 (1966).

Section 103 provides:

"A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made."

In *Sakraida, supra*, the Court said (at 280):

"The ultimate test of patent validity is one of law, *Great A. & P. Tea Co. v. Supermarket Corp.*, 340 U.S. 147, 155 (1950), but resolution of the obviousness issue necessarily entails several basic factual inquiries, *Graham v. John Deere Co.*, *supra*, at 17.

'Under § 103, the scope and content of the prior art are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved.' *Ibid.*"

\* \* \*

"Indeed, respondent admitted at trial 'that the patent is made up of a combination of old elements' and 'that all elements are individually old . . . .' Accordingly, the District Court properly followed our admonition in

*Great A. & P. Tea Co. v. Supermarket Corp.*, *supra*, at 152: 'Courts should scrutinize combination patent claims with a care proportioned to the difficulty and improbability of finding invention in an assembly of old elements. . . . A patent for a combination which only unites old elements with no change in their respective functions . . . obviously withdraws what already is known into the field of its monopoly and diminishes the resources available to skillful men. . . .' *Sakraida, supra*, pp. 280-1.

"We cannot agree [with the appeals court below] that the combination of these old elements . . . can properly be characterized as synergistic, that is, 'result[ing] in an effect greater than the sum of the several effects taken separately.' *Anderson's-Black Rock v. Pavement Co.*, 396 U.S. 57, 61 (1969). Rather, this patent simply arranges old elements with each performing the same function it had been known to perform, although perhaps producing a more striking result than in previous combinations. Such combinations are not patentable under standards appropriate for a combination patent. *Great A. & P. Tea Co. v. Supermarket Corp.*, *supra*; *Anderson's-Black Rock v. Pavement Co.*, *supra*. Under those authorities this assembly of old elements . . . falls under the head of 'the work of the skilful mechanic, not that of the inventor.' *Hotchkiss v. Greenwood*, 11 How., at 267. . . .

" . . . [D]esirable benefits 'without invention will not make patentability.' *Great A. & P. Tea Co. v. Supermarket Corp.*, 340 U.S. at 153. . . ." *Sakraida, supra*, pp. 282-3.

Counsel for the plaintiffs apparently never understood fully the requirement that a patent based on a combination of elements old in the art must produce a new and

unusual result. Counsel stated: "These defendants have asserted that these cases require a patent to have a synergistic result. . . . In their trial brief they said they had to make 2 plus 2 equal 5, which was the expression they used. This appears to be an assertion of one of two things: either 1, an assertion that the Supreme Court has overruled the patent system, or, 2, a requirement that you have to violate or at least disprove a known law of nature before you can have a valid patent. Because obviously 2 plus 2 never equal 5[sic]. . . ." Plaintiffs failed to identify a synergistic result.

The trial court, in Finding of Fact #22, stated:

"22. The brush of the '292 patent does produce an unusual or surprising result which would not be expected by the man having ordinary skill in the art. The flexibility of the brush's spine element, when coupled with the plurality of bristle carrying fingers extending laterally on each side of the flexible spine, with the vents between the finger members, allows the brush to be pulled through the hair with remarkable ease. This is an unusual or surprising consequence from the unification of the elements concerned. It is an unusual or surprising result. It is not merely the sum of the results of the individual elements of the brush but is instead an effect greater than the sum of the effects of the several elements of the brush taken separately."

The trial court's Memorandum of Decision was similar.

We conclude that Claims #1, #3, and #4 of the patent are invalid. Claim #1 recited that the bending of the distal ends of the fingers on the trailing side of the brush "would approach each other." The patent lists various purposes:

- (1) Mechanical action to penetrate thick tresses, dig into the scalp and cause drag on the hair and scalp to accomplish the effects of massage.
- (2) To agitate the root of the hair and its associated muscle tissue and bring additional sebum to the hair and increase the luster of the hair.
- (3) To automatically pinch and tug the hair and thus exercise the hair roots and their environments.
- (4) To provide a hair brush which is easily cleanable, simple in construction, reasonable in cost, and efficient in carrying out the purposes for which it was designed.

(5) Finally, since the tips of the fingers in the patent all come towards each other, causing the bristle tufts to pinch the hair between them, the bristles are generally of stiff material. The attendant movement of the brush will cause the pinched hair to be tugged, dragged on and pulled.

None of these listed "purposes" of the patent produce a "new or different function" (*Anderson's-Black Rock v. Pavement Co.*, 396 U.S. 57 at 60 (1969)) from that produced by the old elements in the combination.

The result claimed by plaintiffs as synergistic, "pulling the brush through the hair with remarkable ease" (Memorandum of Decision) is contrary to the teachings of the patent. The use of two bristles in each tuft, as shown in Exhibit 2, may assist in allowing the brush to be pulled through the hair with ease. The use of such a bristle to accomplish ease of pulling through the hair would be obvious.

Certainly, the two results referred to by the court in its Memorandum of Decision—(1) allowing the brush to be pulled through the hair with remarkable ease, and

(2) the vents allowing the hair to be easily blown dry—  
are not new or unusual results.

It is obvious from the above that the patent is not valid, having no new, unusual or synergistic result,<sup>1</sup> and having no beneficial use other than uses already old in the art of brushes and combs. We also hold Claims #1, #3 and #4 of the patent are invalid for obviousness.

#### *Infringement*

We have examined closely Exhibits 2, 3 and 5. Exhibit 5 is the offending device and a copy of Exhibit 2. Exhibit 3 was the brush made and sold by plaintiffs prior to 1971. The parties stipulated that Exhibit 3 was within the scope and claims of Patent No. 292.

Claim #1 of the patent was limited to a brush "comprising a flexible spine element extending from the handle." It provided: "Said spine will bend so that the distal ends of the fingers on the trailing side of the brush will approach each other." The claim also was limited to "tufts of stiff bristles."

None of these elements are found in the accused structure, Exhibit 5. Examination shows the spine will not bend so as to be flexible enough to bend while the brush is run through the hair. The brush will not function as described in the patent, i.e., the fingers will not "come towards each other, causing the bristle tufts to pinch the hair between them . . ." (Patent p. 1, column

1. Late cases in the Ninth Circuit are in accord with our holding. A combination patent (i.e., an accumulation of old devices) is valid "only when the whole in some way exceeds the sum of its parts . . ." *Astro Music, Inc. v. Eastham*, 564 F.2d 1236, 1238 (9 Cir. 1977).

*Austin v. Marco Dental Products, Inc.*, 560 F.2d 966 (9 Cir. 1977) also involved a combination patent and is in accord with our holding herein.

2, lines 56-63), nor, as described in Claim #1, will "said spine . . . bend so that the distal ends of the fingers on the trailing side of the brush . . . approach each other." (Patent, p. 2, column 2, lines 4-6.)

The plaintiff-inventor testified that the term "flexible" requires sufficient bending to bring the bristles together to grab or clamp the hair between tufts instead of merely floating through the hair. Examination shows that Exhibit 2 or Exhibit 5 cannot cause the above actions.

The trial court, although requested to find as a fact that the spine of the accused device, Exhibit 5, was flexible (R. 213), refused to do so, apparently convinced that the spine was not flexible. Likewise, the court, although requested to find that the mode of operation of Exhibit 5 was as set forth in the patent at Column 2, lines 56-63, refused to do so, apparently convinced that it did not.

Plaintiffs' expert, Mr. Walsh, in describing the operation of plaintiffs' brush, Exhibit 2 (copied by defendants as Exhibit 5) testified that Exhibit 2 was not flexible in the sense used in the patent and that the brush creates no drag or pull.

Also missing from the accused brush, Exhibit 5, are "tufts of relatively stiff bristles." The court refused a request for a finding that the single filament of Exhibit 5 constitutes tufts of relatively stiff material, apparently convinced to the contrary. The substitutions of one filament making two bristles insured the floating movement of the brush, but the elimination of any pulling or grabbing of the hair.

In our case we have an accused device, the brush, Exhibit 5 (a copy of the plaintiffs' brush, Exhibit 2), which does not have the structure or the function described in the patent. It (1) does not have a flexible

spine but a spine which will not bend on use; (2) does not have tufts of bristles, but one single monofilament folded to form two bristles; (3) which, by the trial court's Memorandum of Decision and Finding of Fact #22, has a purpose ("to be pulled through the hair with remarkable ease"), a purpose not listed in the patent and entirely different from the listed objects of the alleged invention; (4) which has no new or unusual or synergistic result; and (5) in toto, a device or brush having a different structure and a different mode of operation and effect than that described in the patent.

It is clear that Exhibit 2, the plaintiffs' device which defendants admittedly copied, and Exhibit 3, the device made by plaintiffs prior to 1971, are different brushes in structure and operation. We have held that the patent claims, #1, #3, and #4, are not valid. But even if valid, it was *not* Exhibit 3 which was copied but Exhibit 2. Exhibit 2 does not infringe the patent.

#### *The Contempt Judgment*

The trial court's Memorandum of Decision was entered on January 20, 1977. On February 28, 1977, the final Judgment was entered. The plaintiffs moved to hold defendants in contempt of court for allegedly violating an injunction against infringement which plaintiffs claim was included within the Memorandum of Decision. After a hearing, Findings of Fact, Conclusions of Law, and Judgment of Contempt were entered on April 4, 1977, against defendants. Defendants have appealed the Contempt Judgment in Appeal No. 77-2638.

The general rule is that an unpatented object may be copied and sold. *Sears, Roebuck & Co. v. Stiffel Company*, 376 U.S. 225 (1964) and *Compco. Corp. v. Day-Brite Lighting, Inc.*, 376 U.S. 234 (1964).

Since we have held the patent invalid, the sole question presented on Appeal No. 77-2638 is whether, after January 20, 1977, there was in effect a valid injunction against infringement by defendants of the plaintiffs' alleged patent.

The Memorandum of Decision ended with an order:

*"It is therefore Ordered that judgment be entered for plaintiffs in the amount specified above and that the defendants be permanently enjoined from further infringing plaintiffs' patent. Counsel for plaintiffs is directed to prepare proposed findings of fact, conclusions of law and judgment pursuant to local Rule 7. (Judgment shall be set forth as a separate document as required by Rule 58, F.R. Civ.P.)*

Dated January 17, 1977

*Laughlin E. Waters*

*United States District Judge"*

*(Emphasis added)*

There are various reasons which demonstrate plaintiffs are in error in their contention that the Memorandum and Order constitute an injunction.

(1) The Memorandum and Order speak of the future. It does not state that defendants *are* enjoined, but, instead, "be" permanently enjoined. We read the language as a direction—the defendants *[will]* be enjoined, after the proposed Findings and Judgment are prepared by plaintiffs' attorney and signed by the court. The Final Judgment, dated February 28, 1977, stated that the defendants and their agents "are forever enjoined and restrained."

(2) Rule 58, F.R.Civ.P. requires—

"every judgment shall be set forth on a separate judgment. A judgment is effective only when so set forth, and when entered as provided in Rule 79(a)."

A recent Supreme Court case, *Bankers Trust Co. v. Mallis*, 435 U.S. 351 (1978), decided after the Contempt Judgment, may have pulled some of the teeth in Rule 58, *supra*, by providing that in certain cases the rule may be waived by the parties. Regardless of the effect or retroactivity, if any, of that case, Rule 58 must be viewed as having a bearing on the intent of the court and the parties as to whether an injunction was intended. The Memorandum directed counsel for the plaintiffs to prepare findings of fact and conclusions of law and judgment pursuant to local Rule 7 and Rule 58, F.R.Civ.P. Local Rule 7 of the Central District of California requires findings of fact and conclusions of law and implements Rule 58, F.R.Civ.P.

(3) Plaintiffs argue that there was an injunction *pendente lite* in the Order. However, the Order speaks of *preparation* of a permanent injunction.

(4) Rule 65(c), F.R.Civ.P. requires security or a bond, unless the court directs otherwise, and findings of fact to support the injunction.

(5) Rule 65(d), F.R.Civ.P. requires that an injunction "... shall describe in reasonable detail, and not by reference to the complaint or other documents, the act or acts to be restrained. . ." The Memorandum of Decision signed by the court did not comply with Rule 65(c) or (d).

(6) Plaintiffs cite no authority that the Memorandum of Decision can be an injunction, and defendants could find none.

It is true that an injunction must be obeyed while objections and questions are presented on appeal. But plaintiffs assume that an injunction was issued. We find that no injunction was issued, but only direction for the

entry of a permanent injunction against infringement. The rule of law above does not apply.

The judgments are reversed and the case remanded to the district court for entry of a judgment on non-validity and non-infringement.

UNITED STATES COURT OF APPEALS  
FOR THE EIGHTH CIRCUIT

---

No. 78-1341

No. 78-1301

---

Reinke Manufacturing Company, Inc.,  
Appellant-Cross-Appellee,

v.

Sidney Manufacturing Corporation,  
Appellee-Cross-Appellant.

---

Appeal from the United States District Court  
for the District of Nebraska

---

Submitted: November 15, 1978

Filed: February 26, 1979

---

Before STEPHENSON, HENLEY and McMILLIAN, Circuit  
Judges.

---

STEPHENSON, Circuit Judge.

This case involves two patents, No. 3608826 ('826) and No. 3750953 ('953), on a circular irrigation system known as the Electrogator. Plaintiff-appellant Reinke

Manufacturing Company, the assignee of the patents, primarily appeals from the trial court's<sup>1</sup> determination that the patents are invalid for reasons of obviousness. Defendant-appellee Sidney Manufacturing Corporation, the alleged infringer of the patents, primarily cross-appeals from the trial court's determination that, if the patents are valid, Sidney infringed the claims of the patents in question.<sup>2</sup>

Because we affirm the district court's finding that the patents are invalid for reasons of obviousness under 35 U.S.C. § 103,<sup>3</sup> it is not necessary to consider the issue of infringement. There can be no infringement of an invalid patent. *Greening Nursery Co. v. J & R Tool & Mfg. Co.*, 376 F.2d 738, 742 (8th Cir. 1967).

The Supreme Court set out the section 103 standard in *Graham v. John Deere Co.*, 383 U.S. 1, 17-18 (1966):

While the ultimate question of patent validity is one of law, \* \* \* the § 103 condition, which is but one of three conditions, each of which must be satisfied,<sup>4</sup> lends itself to several basic factual inquiries. Under § 103, the scope and content of the prior art

1. The Honorable Robert F. Denney, United States District Judge for the District of Nebraska.

2. Sidney also raises several other issues, but in light of our holding, a discussion of those is not necessary.

3. 35 U.S.C. § 103 provides:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. In addition to being nonobvious, an invention must also be useful and novel in order to be patentable. 35 U.S.C. §§ 102, 103; *Clark Equip. Co. v. Keller*, 570 F.2d 778, 785 (8th Cir. 1978), cert. denied, 437 U.S.L.W. 3222 (Oct. 3, 1978, No. 77-1640).

are to be determined; differences between the prior art and the claims at issue are to be ascertained; and the level of ordinary skill in the pertinent art resolved. Against this background, the obviousness or nonobviousness of the subject matter is determined. Such secondary considerations as commercial success, long felt but unsolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented. As indicia of obviousness or nonobviousness, these inquiries may have relevancy. \* \* \*

This is not to say, however, that there will not be difficulties in applying the nonobviousness test. What is obvious is not a question upon which there is likely to be uniformity of thought in every given factual context. The difficulties, however, are comparable to those encountered daily by the courts in such frames of reference as negligence and scienter, and should be amenable to a case-by-case development. We believe that strict observance of the requirements laid down here will result in that uniformity and definiteness which Congress called for in the 1952 Act.

While a presumption of validity is accorded to patents that have "survived the scrutiny of the Patent Office," *Woodstream Corp. v. Herter's, Inc.*, 446 F.2d 1143, 1149 (8th Cir. 1971), and while the primary responsibility for initially making determinations inherent in approving patents lies with the Patent Office, the reviewing court has the responsibility of applying the strict and invariable standard of section 103 as mandated by the Supreme Court in *Graham v. John Deere Co.*, *supra*, 383 U.S. at 17-19.

In applying section 103, it is important to keep in mind that the test is not whether the object is an improvement in the art; it is not whether the object works better; "an

improvement which is obvious to those skilled in the art is not entitled to protection." *Airlite Plastics Co. v. Plasti-lite Corp.*, 526 F.2d 1078, 1082 (8th Cir. 1975), cert. denied, 425 U.S. 938 (1976).

The district court's factual discussion of the Reinke patents provides an excellent understanding of the subject matter:

The subject of the Reinke patents is an electrically driven circular irrigation system in which the water pipe carrying sprinkler heads serves as part of a traveling sectional boom. One end of the boom is connected to a stand assembly positioned in the center of a square area to be irrigated. The boom moves in a circular path around the stand assembly. Such machines are generally known as center pivot irrigation systems, because the boom carrying the sprinkler heads travels around the central stand or pivot location containing the water supply pipe.

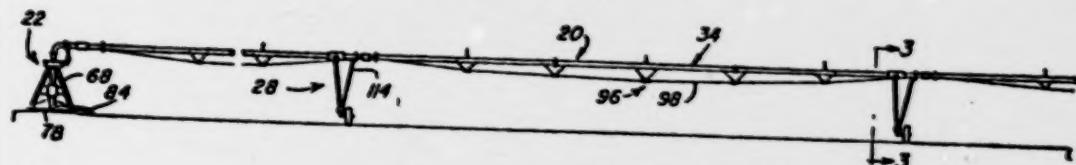
In the Reinke patents, the boom is propelled in a circular path by electrically driven wheeled towers, i.e., "drive units," spaced at intervals. The wheel assemblies also provide support so that the boom is maintained in a straight line as it rotates. The boom itself consists of the water pipe and a supporting truss assembly underneath and interconnected with the water pipe.

Generally, the truss is constructed as follows[:] \*\*\* The water pipe forms the top chord of the truss, and the bottom or tension chord is formed by cables or tie rods. On either side of the water pipe, brace chords in the shape of a "V," attached to the pipe at the upper ends of the V, extend downward with the apex of each V connected to a bottom or tension chord.

The V braces form the web members of the truss. A transversely extending brace, or connector bar, is attached to the apices of the V's at the points where the apices are fixed to the bottom or tension chords.

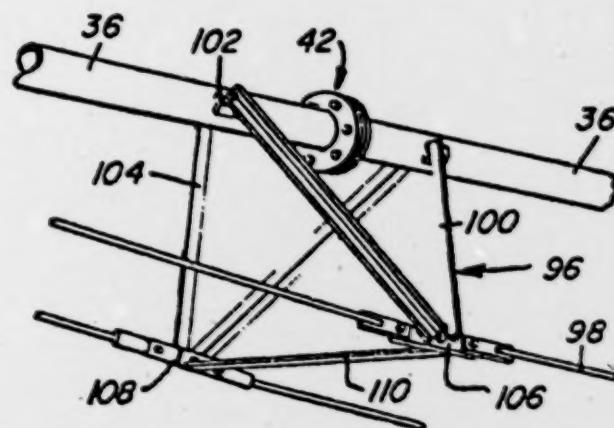
*Reinke Mfg. Co. v. Sidney Mfg. Corp.*, 446 F. Supp. 1056, 1060 (D. Neb. 1978).

Fig. 2a of Patent '826



Side Sketch of Electrogator

Fig. 14 of Patent '826



Close-up Sketch of Truss Section of Electrogator

The dispute in this case centers around claims 4 and 11 of the '826 patent, and claims 1, 3, 4 and 5 of the '953 patent,<sup>5</sup> which primarily describe the truss which supports the water pipe and the attaching devices used in conjunction with the truss.

5. The claims provide in pertinent part:

The '826 patent:

4. An irrigation apparatus comprising an elongated pipe [.] \* \* \* said elongated pipe including a truss structure disposed along the undersurface thereof between the wheeled means, said structure including a plurality of pairs of V-shaped braces having the upper ends connected to the pipe in longitudinally spaced relation with the braces in each pair depending downwardly in converging relation to each other and in diverging relation to the braces in an opposed pair, means interconnecting the apices of the pairs of braces to retain them rigidly in spaced-apart relation, and tension rods connected longitudinally of the apices of the braces along each side of the pipe with the ends thereof being connected to the pipe at the end of each section thereof thereby rigidifying and supporting the pipe.

11. \* \* \* that improvement comprising a supporting truss structure for the pipe including a plurality of longitudinally spaced brace assemblies fixed to said pipe and depending therefrom, each brace assembly including a pair of opposed brace members of V-shaped configuration having the upper ends thereof attached to the pipe and depending in diverging relation, means retaining the lower apices of opposed pairs of brace members in spaced relation, and tension members connected to the apices of said brace members and extending and attached to the pipe at remote points for rigidifying the pipe and forming a truss support therefor.

The '953 patent:

1. \* \* \* that improvement comprising a supporting truss structure for the pipe including a plurality of longitudinally spaced brace assemblies fixed to said pipe and depending therefrom, each brace assembly including a pair of opposed brace members of V-shaped configuration having the upper ends thereof attached to the pipe and depending in diverging relation, means retaining the lower apices of opposed pairs of brace members in spaced relation, and tension members connected to the apices of the brace members and extending and attached to the pipe at remote points for rigidifying the pipe and forming a truss support therefor, said pipe being sectional with the sections being joined by abutting end flanges, said tension members being attached to the pipe by extending through and being secured to a pair of abutting flanges.

(Continued on following page)

The district court stated the issue as follows:

Center pivot irrigation equipment is subject to a variety of loads and stresses, such as the weight of its own structure, natural forces such as wind, stresses arising from the dynamics of travel over rough terrain, uneven loads as water passes through the pipe. All such machines, therefore, must include features to maintain the pipe in alignment and avoid breakage or collapse of the pipe spans and drive units.

Footnote continued—

3. \* \* \* that improvement comprising a supporting truss structure for the pipe including a plurality of longitudinally spaced brace assemblies fixed to said pipe and depending therefrom, each brace assembly including a pair of opposed brace members of V-shaped configuration having the upper ends thereof attached to the pipe and depending in diverging relation, means retaining the lower apices of opposed pairs of brace members in spaced relation, and tension members connected to the apices of the brace members and extending and attached to the pipe at remote points for rigidifying the pipe and forming a truss support therefor, the upper ends of the brace members being secured to angular clips rigidly affixed to the exterior surface of the pipe.

4. \* \* \* a supporting truss structure for the pipe including a plurality of longitudinally spaced brace assemblies fixed to said pipe and depending therefrom, each brace assembly a pair of opposed brace members having the upper ends thereof attached to the pipe and depending in diverging relation, means retaining the lower ends of opposed pairs of brace members in spaced relation, and tension members connected to the lower ends of the brace members and extending and attached to the pipe at remote points for rigidifying the pipe and forming a truss support therefor, the upper ends of the brace members being secured to clips rigidly affixed to the exterior surface of the pipe, said tension members being attached to the pipe by being secured to flanges on the pipe.

5. The structure as defined in claim 4 wherein said pipe is sectional with the sections being joined by abutting end flanges, said tension members extending through and being secured to a pair of abutting end flanges, each of said opposed brace members including two depending members defining a substantially V-shaped configuration having their lower end portions connected with each other and the tension members being connected with the lower end portions of the brace members.

Mr. Reinke asserts \* \* \* that his truss structure prevents or withstands "wallowing" or "whipping" under such stresses by the "manner in which the braces and pipe are arranged and interconnected with each other and the tying rods [which] produces an interaction which rigidifies the assembly." Defendant contends that even if the Reinke V-brace configuration withstands loads and stresses more effectively than truss structures previously used on pivot sprinklers, the Reinke trussed pipe represents an obvious extension of the prior art.

*Reinke Mfg. Co. v. Sidney Mfg. Corp., supra*, 446 F. Supp. at 1068 (footnote omitted).

As the district court noted, the patents in question are combination patents and "[c]ourts should scrutinize combination patent claims with a care proportioned to the difficulty and improbability of finding invention in an assembly of old elements. . . . A patent for a combination which only unites old elements with no change in their respective functions . . . obviously withdraws what already is known into the field of its monopoly and diminishes the resources available to skillful men . . . ." *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 281 (1976), quoting from *Great A. & P. Tea Co. v. Supermarket Equip. Corp.*, 340 U.S. 147, 152-53 (1950). Thus, if the claims cover a structure that combines old and well known elements, one of the factors this court must look for in determining whether the patents meet section 103 requirements is synergism: that which results "in an effect greater than the sum of the several effects taken separately." *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 61 (1969).

In our examination we will not only consider whether it was *obvious* that by putting together the various elements used the result would be the effect achieved in

the Electrogator; we will also consider whether the effect is a new effect, or simply each of the items performing its expected function.

As directed by *Graham*, we shall examine the prior art, the differences between the prior art and the claims in issue, and the level of ordinary skill in the art.

#### A. Prior Art

Initially we note that principles of truss design are long known to the structural arts of bridge, roof and related designs. A truss is essentially a structure consisting of straight pieces joined to form a series of triangles in a single plane. Continuous triangles may also be built into more than one plane, in which case the truss will have stability in each plane in which triangular support is found.

"Shear" consists of forces acting along a planar surface. If the shear load is more than the material can stand, it will fracture along the plane where the shear load is too great. Under tension, molecules spread or expand. Under compression, they compress. In a truss, members of the triangle resist by tension the tendency of other members to compress, and vice versa.

In general, the truss is based upon the geometric principle that the shape of a triangle cannot be deformed without altering the length of its sides, i.e. the sides of a triangle cannot move with respect to each other. The web members of a truss, the diagonal and vertical elements, assuming adequate connection features, maintain stability between the horizontal upper and lower chords of the truss. Therefore, as the triangle is the most stable planar configuration,

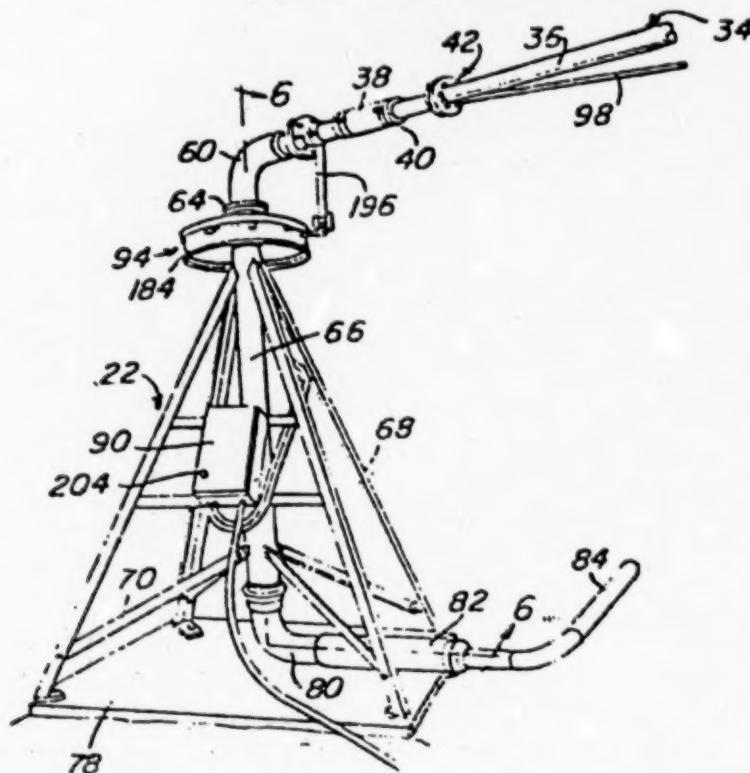
the more planes into which triangulation is introduced, the greater the stability of the structure.<sup>6</sup>

*Reinke Mfg. Co. v. Sidney Mfg. Corp., supra*, 446 F. Supp. at 1070. Further, the connecting device is described by the claims in dispute, i.e., the angle clips connecting the V-braces to the waterpipe and the method of connecting the ends of the tie rods,<sup>7</sup> are not new connecting devices

6. There was sufficient evidence to support the conclusion that "trusses" are obvious. There was testimony from two expert witnesses concerning principles of truss construction and there was evidence of the use of truss structures in other similar irrigation systems and in bridge construction.

7. This consisted of extending the ends of the tie rods through holes in the pipe coupling flanges at the end of the boom section.

Fig. 5 of Patent '826

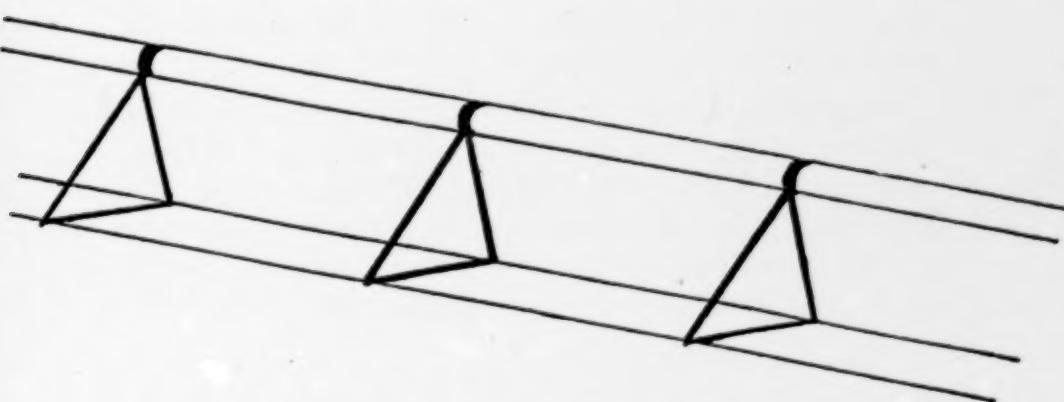


See picture in text, p. 5, Figure 14, No. 102 for an example of the angle clip.

or methods; all were known as part of the art prior to construction of the Electrogator.

Sidney relies upon (1) the "Raincat" system; (2) the "Modified Mel Brown" system; (3) the Wallace U.S. Patent No. 3,335,958; (4) the Allwood Australian Patent No. 227737; and (5) the illustrations in the Swiss Klasse Patent No. 201557 as evidence of prior art pertaining to the mechanical function of the irrigation system.

The Raincat is a pivot irrigation system with the waterpipe supported underneath by a simple truss design of triangular braces in vertical planes transverse to the pipe. The lower corners of the braces are connected by longitudinal tie members extending between the corners and up to the pipe. There is a 90-foot span between the drive units.



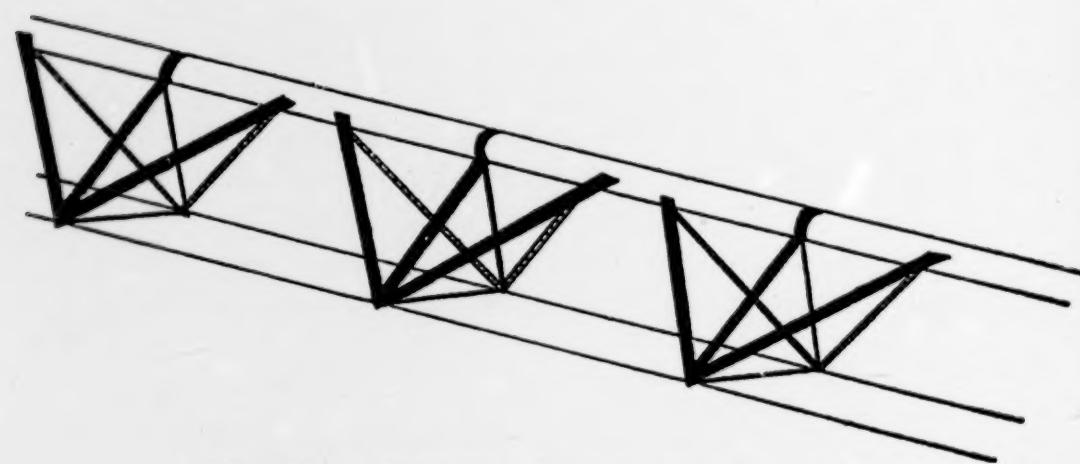
Example of triangular braces

Although the Raincat was built somewhat differently over a period of years, there was testimony that indicated that the arms of the triangles in the truss system were either attached to the waterpipe with clamps that were fastened around the machine or fastened to the flange that hooked together the pipe spans. In subsequent machines, the arms of the braces were welded to lugs.

At the beginning of production of the Raincats, the tie rods were fastened to the pipe with U-bolts.

The Modified Mel Brown—in essence, a modified Raincat—came about as a result of experimentation with the Raincat. Because the U-bolts connecting the tie rods slipped on the original design, the arm of the machine would go into an S-curve and consequently bend the waterpipe.

The first step toward correcting this problem was to put a V-brace at the center triangular brace, in order to keep the waterpipe and the tension rods from going in different directions (causing the S-curve).



Example of V-braces added to triangular braces

The V-brace, depending upon the movement of the pipe and tension rods, will go into either tension or compression.

Later still, the V-braces were eliminated when the U-bolts were changed; the tension rods were instead welded together at a common point onto the pipe, solving the S-curve problem in a different manner.<sup>8</sup>

The Wallace U.S. Patent No. 3335958 and the Allwood Australian Patent No. 227737 are irrigation systems similar

8. One of Reinke's contentions on appeal is that the evidence was insufficient to establish the Modified Mel Brown as prior art. We hold the evidence was sufficient; Mel Brown testified that he had built at least two of the modified structures and that they were shipped out to be used by customers. There was corroborating evidence of a drawing reflecting the modified design, which was initialed by Mel Brown and dated March 26, 1963. The Reinke Patents are dated 1971 and 1973. Although Brown did admit that the structure as built was somewhat different than the drawing, the differences were minor. The primary modification, the added V-brace, was reflected in the drawing and Brown testified that the change was made to the two structures on which he worked.

to the Raincat and the Electrogator. The Swiss Patent No. 201557 discloses the truss structure of what was referred to in testimony as a bridge. It was admitted as evidence by the district court but limited to the illustrations; the text is not translated into English.

Thus the scope and content of the prior art as shown at trial is, at its most refined point, generally included in the Raincat and Modified Mel Brown systems.

*B. The Differences Between the Prior Art and the Claims in Issue*

Reinke's primary argument is that none of the prior art discloses an arrangement in which the pipe between each pair of drive units is rigidified laterally, vertically, and torsionally by joining it with a plurality of assemblies of opposed braces of V-shape so arranged from one another and interconnected by the tie rods as in the Electrogator.

It is true that the Allwood, Raincat and Modified Mel Brown units all have vertical supports—the Electrogator does not. However, the Modified Mel Brown, in addition to the vertical supports, also has V-shaped braces similar to those on the Electrogator. In addition, truss design in general makes use of triangular braces in different planes in order to provide the support strength for which trusses are used.

Reinke still contends that the effect of its invention was to achieve a self-propelled irrigation system with a span between drive units in excess of 90 feet (120 feet) with the same attributes of strength, alignment and economy as the previously marketed irrigation systems with only 90-foot spans between drive units. Reinke partially attributes this to the connecting devices used in the Electrogator. The connecting devices for the truss support

and the tie rods were different<sup>9</sup> in the Electrogator from prior art insofar as irrigation systems are concerned. Because Reinke alleges that the combined effect of all of the elements was new—new in that it created an effect heretofore undiscovered which enabled the span distance between drive units to be increased to 120 feet—Reinke contends that this complies with the concept of synergism.

We do not agree that this is synergism.

When the resulting new combination produces a totally new functional aspect, to deny patentability in every case would be to sanction the use of "hindsight" in light of the claimed patent. However, at the same time, to deny patentability where the combination of

9. We note that Mr. Reinke did not attribute a great deal of importance to this at trial:

Q. [Mr. Thomte] I believe, Mr. Reinke, that you testified that the location of the openings in the flanges for the tie rods, were, I think in using your words, located at a very critical or strategic place. Would you elaborate on that, please?

A. [Mr. Reinke] They are located in the flange about one-third from the bottom because that is the most economical way to do it that I know of and as another pipe is attached to it, which there always is in this system, you have two flanges to go through, and that makes the cheapest, the most economical, the strongest way to attach the end tie rod.

Q. Could the tie rod be attached at the upper portion of the flange or at the bottom of the flange?

A. It could be.

Q. It wouldn't matter really where you attach it?

A. It would matter; it would make a difference, but not a significant difference.

Q. No significant difference where it is attached?

A. Well, I wouldn't make it that broad.

Q. I think that is just what you said, Mr. Reinke, that there wouldn't be any significant difference?

A. What I am saying is that it is located at the most ideal location, one third up.

elements is an obvious step, where no inherent difficulties or deterrents are involved in making the step, where the new combination results in a natural phenomenon, even though all of the advantages were not foreseen, should not bring into play the introspective condemnation of using "hindsight." The test of obviousness, again, must turn upon a case by case analysis.

*National Connector Corp. v. Malco Mfg. Co.*, 392 F.2d 766, 771 (8th Cir.), cert. denied, 393 U.S. 923 (1968).

Thus, the difference here, even when considered most favorably to Reinke, must be confined to the fact that Reinke used a better and different truss design than had been used before in irrigation systems; Reinke used better and different connecting devices than had been used before in irrigation systems; and Reinke achieved a longer span between drive units—without compromising other qualities—than had been achieved before in irrigation systems.

### C. Level of Ordinary Skill in the Art

Testimony at the trial indicated that a person of ordinary skill in the structural arts in 1967 would have been a person "with somewhat more than elementary skills in and knowledge of the structural engineering arts who was conversant with irrigation equipment. Such person would have been aware of basic principles of truss design." *Reinke Mfg. Co. v. Sidney Mfg. Corp.*, *supra*, 446 F. Supp. at 1070.

The question that must be resolved is whether this hypothetical person of ordinary skill in the art could have created the Electrogator with the differences as noted in Part B, *supra*. If such an ordinary person could have achieved the advancements discussed, the Electrogator is not a patentable invention as anticipated by section 103.

As we stated in *University of Ill. Foundation v. Winegard Co.*, 402 F.2d 125, 127 (8th Cir. 1968), cert. denied, 394 U.S. 917 (1969), quoting *Atlantic Works v. Brady*, 107 U.S. 192, 199-200 (1882):

The process of development in manufactures creates a constant demand for new appliances, which the skill of ordinary head-workmen and engineers is generally adequate to devise, and which, indeed, are the natural and proper outgrowth of such development. Each step forward prepares the way for the next, and each is usually taken by spontaneous trials and attempts in a hundred different places. To grant to a single party a monopoly of every slight advance made, except where the exercise of invention, somewhat above ordinary mechanical or engineering skill, is distinctly shown, is unjust in principle and injurious in its consequences.<sup>10</sup>

As we stated before, the truss design in the Electrogator appears to be a better truss design than the Modified Mel Brown; the angle clip appears to be a better connecting device; and the attachment of the tension rods to the pipe in the Electrogator design appears to be a better way of connecting them. Because of these improvements, the span between the Electrogator drive units can be

10. For example, as the Supreme Court stated in *Busell Trimmer Co. v. Stevens*, 137 U.S. 423 (1890):

The most that can be said of [the patent before us] is that it shows \* \* \* great industry in acquiring a thorough knowledge of what others had done in the attempt to trim shoe soles in a rapid and improved mode, by the various devices perfected by patents for that purpose, good judgment in selecting and combining the best of them, with no little mechanical skill in their application; but it presents no discoverable trace of the exercise of original thought.

*Busell Trimmer Co. v. Stevens*, *supra*, 137 U.S. at 435, quoted in *University of Ill. Foundation v. Winegard Co.*, 402 F.2d 125, 127 n.4 (8th Cir. 1968), cert. denied, 394 U.S. 917 (1969).

greater while still maintaining all other desirable features. Yet, the improvements and the results achieved by those improvements are no more than those which a "hypothetical person skilled in the art, who has thought about the subject matter of the patent invention in the light of that art" could have accomplished. *Flower City Architectural Metals v. Alpana Aluminum Prod., Inc.*, 454 F.2d 98, 108 (8th Cir. 1972).<sup>11</sup>

There is substantial evidence to support the trial court's finding that the '826 and '953 patent claims in issue are invalid for reasons of obviousness. It is therefore unnecessary to reach the issue of infringement. We affirm.

A true copy.

Attest: /s/ Robert C. Tucker  
Clerk, U. S. Court of Appeals,  
Eighth Circuit.

11. Reinke argues that the testimony of the fabrication manager for Layne & Bowler (manufacturer of the Raincat), Mr. Walker, is in direct conflict with the trial court's finding of obviousness. Walker's testimony indicated that Layne & Bowler experimented with various truss designs in order to achieve a 120-foot span while still keeping other desirable features. Under the mandate of *Graham*, this "failure of others" is certainly a factor which may be considered as indicia of obviousness, *Graham v. John Deere Co.*, *supra*, 383 U.S. at 17-18. "But where, as here, the facts establish convincingly that the invention was obvious against the background of the relevant prior art, [this] cannot be controlling." *Cummins Engine Co. v. General Motors Corp.*, 299 F. Supp. 59, 89 (D. Md. 1969), *aff'd*, 424 F.2d 1368 (4th Cir. 1970), quoted in *Hadfield v. Ryan Equip. Co.*, 456 F.2d 1218, 1221 (8th Cir. 1972).

## CONSTITUTIONAL AND STATUTORY PROVISIONS

1. Article I, Section 8, Clause 8, of the Constitution provides:

The Congress shall have Power . . .

. . .  
To promote the Progress of Science and useful Arts, by securing for limited Times to Authors and Inventors the exclusive Right to their respective Writings and Discoveries. . . .

2. Sections 101, 102, 103 and 112 of the Patent Code of 1952 provide (35 U.S.C. §§ 101-03, 112):

### § 101. Inventions patentable

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

### § 102. Conditions for patentability; novelty and loss of right to patent

A person shall be entitled to a patent unless—

(a) the invention was known or used by others in this country, or patented or described in a printed publication in this or a foreign country, before the invention thereof by the applicant for patent, or

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country more than one

year prior to the date of the application for patent in the United States, or

(c) he has abandoned the invention, or

(d) the invention was first patented or caused to be patented by the applicant or his legal representatives or assigns in a foreign country prior to the date of the application for patent in this country on an application filed more than twelve months before the filing of the application in the United States, or

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or

(f) he did not himself invent the subject matter sought to be patented, or

(g) before the applicant's invention thereof the invention was made in this country by another who had not abandoned, suppressed, or concealed it. In determining priority of invention there shall be considered not only the respective dates of conception and reduction to practice of the invention, but also the reasonable diligence of one who was first to conceive and last to reduce to practice, from a time prior to conception by the other.

### **§ 103. Conditions for patentability; non-obvious subject matter**

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

### **§ 112. Specification**

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention. A claim may be written in independent or dependent form, and if in dependent form, it shall be construed to include all the limitations of the claim incorporated by reference into the dependent claim.

An element in a claim for a combination may be expressed as a means or step for performing a specified function without the recital of structure, material, or acts in support thereof, and such claim shall be construed to cover the corresponding structure, material, or acts described in the specification and equivalents thereof.

78-1831

**No. 78-1381**

---

---

In the  
**Supreme Court of the United States**  
OCTOBER TERM, 1978

---

---

HESSTON CORPORATION,

*Petitioner,*

*vs.*

DEERE & COMPANY,

*Respondent.*

---

---

On Petition for Writ of Certiorari to the  
United States Court of Appeals for the Tenth Circuit

---

**BRIEF FOR RESPONDENT IN OPPOSITION**

---

DUGALD S. McDougall

THEODORE R. SCOTT

135 South LaSalle Street

Chicago, Illinois 60603

*Attorneys for Respondent*

## TABLE OF CONTENTS

	PAGE
COUNTER-STATEMENT OF THE CASE .....	2
A.. Petitioner's Patents In Suit .....	2
B. The Prior Art Relating To Haystacking Machines As It Existed Before Cordell Lundahl Began His Work .....	3
C. Cordell Lundahl's Early Work With Stacking Wagons, And The Role It Played As Prior Art Against Petitioner's Patents .....	5
ARGUMENT .....	12
CONCLUSION .....	16

## APPENDIX

Excerpt From The Testimony Of Lynn G. Foster .....	1b
Excerpt From The Testimony Of David W. DePuy ....	7b
Excerpt From The Testimony Of Warren A. DePuy ....	10b
Excerpt From The Testimony Of Cordell Lundahl .....	18b
Amended Complaint In <i>DePuy Enterprises, Inc. v.</i> <i>Ezra C. Lundahl Inc.</i> (DX 18) .....	14b

## TABLE OF CASES

<i>Anderson's-Black Rock, Inc. v. Pavement Salvage Co.</i> <i>Inc.</i> (1969) 396 U.S. 57, 61 .....	12, 13
<i>Graham v. John Deere Co.</i> (1966), 383 U.S. 1, 3, 5-6 .....	12, 13, 14
<i>Great A. &amp; P. Co. v. Supermarket Equipment Corp.</i> (1950), 340 U.S. 147, 152 .....	12

<i>Republic Industries, Inc. v. Schlage Lock Co.</i> (7th Cir., 1979), 592 F2d 963 .....	12
<i>Robbins Co. v. Lawrence Mfg. Co.</i> (9th Cir., 1973), 482 F2d 426, 433 .....	14, 15
<i>Sakraida v. Ag Pro, Inc.</i> (1976), 425 U.S. 273, 280-281	12
<i>In Re Yarn Processing Patent Litigation</i> (5th Cir., 1974), 498 F2d 271, 287 .....	15

### **CITATIONS IN THIS BRIEF**

The citations in this brief are either to the text of the petition for certiorari, the petitioner's appendix integrally bound therewith, or to the appendix which accompanies this brief.

Since the pages of the petition and the two appendices are distinctively numbered, citations herein specify only the page number to which the Court's attention is invited. Thus, a citation "(pp. 2-4)" refers the Court to the petition, a citation such as "(A4-A6)" is a reference to petitioner's appendix, and a citation in the form "(11b-13b)" alludes to the respondent's appendix, bound with this brief.

Throughout this brief, except where otherwise indicated, emphasis in quotations has been added.

IN THE  
SUPREME COURT OF THE UNITED STATES  
OCTOBER TERM, 1978

**No. 78-1381**

---

HESSTON CORPORATION,

*Petitioner,*

*vs.*

DEERE & COMPANY,

*Respondent.*

---

On Petition for Writ of Certiorari to the  
United States Court of Appeals for the Tenth Circuit

---

### **BRIEF FOR RESPONDENT IN OPPOSITION**

---

Respondent agrees that this Court has jurisdiction, under 28 U.S.C., §1254(1), to consider the petition for writ of certiorari in this case. The petition, however, presents no question deserving of this Court's attention, and the complaints voiced in it are without substance.

Petitioner notwithstanding, the case involves no novel or disputed question of law. The invalidity of petitioner's patents was established under settled rules of law by the *facts*, as found by the District Court and unanimously affirmed by the Court of Appeals.

Even a casual reading of petitioner's "Statement of the Case" (pp. 5-11) reveals unwillingness to face the facts as the District Court found them. For what petitioner's statement does contain, it justly rates criticism, since many of its assertions — blandly made without record references — are squarely in conflict with the findings made below. And for what it does not contain, petitioner's statement rates even more criticism, saying as it does literally nothing about the most important facts in the case! (We refer to the prior art in view of which the petitioner's patents were held invalid for obviousness.)

Inasmuch as petitioner has not fairly stated the case, we shall in the following paragraphs undertake to do so.

#### **COUNTER-STATEMENT OF THE CASE**

##### **A. Petitioner's Patents in Suit.**

Of the eight patents in suit, Nos. 3,728,849 and 3,828,535 were issued to petitioner as assignee of one Cordell Lundahl of Logan, Utah; those patents, respectively directed to a method for making haystacks and a machine for that purpose, were referred to in the District Court's opinion as "Lundahl I" and "Lundahl II" (A3), and they will be similarly designated in this brief.

Patents in suit No. 3,556,327 (directed to a haystacking machine) and No. 3,847,072 (directed to a haystacking method) were taken out by petitioner on patent applications filed in the name of its engineering employee Keith Garrison. In the District Court's opinion (A3) and in this brief, those patents are respectively referred to as "Garrison I" and "Garrison II".

Both the Lundahl and Garrison patents purport to claim haystacking machines or methods in broad terms;

collectively they constitute, as the District Court noted (A4), the four major patents in issue.

The other four patents in suit relate not to broad concepts but rather to structural details such as door latches and tailgate actuators; they were referred to in the District Court's opinion (A19) as the "minor patents".

In chronological terms, the machine and method disclosed in the Lundahl patents long antedated the machine and method claimed in the Garrison patents, Garrison's work having been done in the course of modifying the 1966-67 Lundahl machine to adapt it for commercial production (A6, A18). The initial patent application from which the Garrison patents matured was, however, filed by petitioner several months before petitioner filed any application on Lundahl's work (A6).\*

##### **B. The Prior Art Relating To Haystacking Machines As It Existed Before Cordell Lundahl Began His Work.**

While the petition does not admit it, stack-forming wagons were in fact old art long before either petitioner or Cordell Lundahl entered the field (A14-A15). And those early wagons included means for performing all of the functions of petitioner's present day machines, though on a smaller scale.\*\*

---

\* As the District Court found (A4-A6), Lundahl's early work on machines for making haystacks was sponsored by a family-owned company called Ezra C. Lundahl, Inc. After petitioner became interested in Lundahl's ideas, it acquired the assets of Ezra C. Lundahl, Inc. and directed its own engineer Keith Garrison "to complete and to reduce to practice a haystacking wagon based on Cordell Lundahl's original concepts".

\*\* It is self-evident that a machine having only a team of horses as a source of power could not in the nature of things form and transport haystacks weighing several tons, as modern tractor-powered machines are able to do.

Examples of such prior-art haystack-forming wagons are those disclosed in the Hale, Isom, and Sutherland patents, summarized in some detail in the District Court's opinion (A14-A15). Anent them, the District Court wrote:

"The prior art cited by Deere and by the patent examiners clearly reveals that each element of the Hesston combination patents and the four minor patents was disclosed in earlier patents. The Hale and Isom patents, for example, taught picking up hay from the field and elevating it into a confining chamber. Hale also taught even distribution through a device over the bin that reciprocated back and forth. The Isom and Sutherland British patents respectively taught the use of a 'tamping member' and a vertical compression chamber."

After weighing carefully the differences between the prior art and the subject matter of petitioner's patents, the District Court made these decisive findings (A23-A24):

"While Hesston's patents certainly demonstrate the work of a skilled mechanic, the differences between these patents and the prior art do not achieve a non-obvious, patentable difference. The Hesston patents have combined old elements that continue to function in the same capacity as they did outside Hesston's combinations, and they do not perform a new and different function even though Hesston wagons succeeded in producing a striking result by combining the old elements."

How well-based those findings are the Court may judge for itself by referring to claim 1 of the old Isom patent and claim 1 of the Sutherland patent, quoted by the District Court (A15) as apt summaries of what those prior-art patents taught.

Pertinent as it was, the prior art embodied in earlier patents was not the only evidence that petitioner's patents are invalid. In addition, all of Lundahl's work was prior art against the petitioner's Garrison patents, and Lundahl's early work — in the public domain by reason of public use and sale — was prior art against petitioner's Lundahl patents. The facts in that regard, next to be related, make an interesting story in their own right.

**C. Cordell Lundahl's Early Work With Stacking Wagons, And The Role It Played As Prior Art Against Petitioner's Patents.**

Cordell Lundahl's early work with haystack-making wagons took place in the years 1964-1966, his initial concept having involved the formation of a haystack in the bed of a wagon, with stack compression achieved by moving a false front backward across the wagon bed to compress the hay against the rear doors (A4). In addition to such horizontal compression, Cordell Lundahl's early haystack wagons had two swingable gate-like presses which compacted hay vertically; and, in his later models, Lundahl added supplemental compressors to the underside of the gate-like presses to give the hay still more vertical compression (A4-A5).

During the winter of 1965-66, Ezra C. Lundahl Inc. decided to put Cordell Lundahl's haystack-forming wagon on the market, and to that end an advertisement was placed in the *Montana Farmer-Stockman*, issue of February 3, 1966, announcing a "one man automatic feeding system for long hay" that would "also stack and compress loose hay from the windrow" (A5). As a result of that advertisement Ezra C. Lundahl Inc. sold a hay-stacking wagon to DePuy Enterprises Inc. on July 1, 1966, such wagon being the one referred to in the opinions

below as the "DePuy machine" (A5). That machine, as sold, contained Cordell Lundahl's most advanced stack-forming mechanism, but it did not contain any apparatus for picking up cut hay and placing it in the wagon bed; hence it had to be loaded with a tractor-operated pitchfork (A5). (Lundahl, at the time, planned to improve the machine by adding a pickup mechanism; in fact, the Lundahl company promised (15b) to provide DePuy with an automatic pickup attachment in time for use during the 1967 haying season.)

The DePuy machine, having been sold in July, 1966, and publicly used in Montana during 1966 and 1967, was held by the courts below to be in the public domain by virtue of 35 U.S.C. §102(b), and hence to have been prior art against all of the petitioner's patents. (The earliest one of petitioner's applications was lodged in the Patent Office more than a year after the DePuy machine had been sold and placed in public use.)

In attacking that holding, petitioner calls the DePuy machine an "Unsuccessful Abandoned Experiment" (p. 6), but without even attempting to show that the District Court's finding to the contrary (A25) was erroneous.

In truth a wealth of evidence supported — indeed demanded — the finding that the sale of the DePuy machine was a routine commercial transaction, effective under 35 U.S.C., §102(b), to make the machine prior art against all patent applications filed more than a year later. The proofs show that the DePuy machine was not constructed as ruggedly as it should have been, but apart from that it worked very well. That is evident from the testimony of both Warren A. DePuy and his son, David W. DePuy, both of whom criticized only the lightness of the machine's

construction rather than the manner in which it did its job. Thus, they complained that the machine's sides had to be reinforced (8b-9b), that a bar had to be added across the end to keep the two sides from spreading apart (7b), that it had proved necessary to reinforce the tailgate to withstand the pressure generated by compressed hay in the wagon (7b-8b), and that the rear-end actuating mechanism was dangerous because, on being unlatched, the tailgates would swing open violently when the wagon contained a stack of hay (12b).

Those criticisms were probably justified; it does appear that Cordell Lundahl, in engineering the DePuy machine, did not make it as strong as he should have. Nonetheless the record leaves no doubt that when the machine worked, as it did nearly all the time, it did its job well. Both Warren and David DePuy testified (8b, 12b) that the machine stacked six hundred acres of hay in 1966 (300 acres through first and second cuttings) and at least three hundred additional acres of hay in 1967.

Neither at the trial nor on the ranch did DePuy criticize the quality of the haystacks his machine made when it was working. In fact, on an occasion when Cordell Lundahl was at DePuy's ranch with representatives of petitioner, Warren DePuy was asked if any of his haystacks had gone moldy, and DePuy replied that he would "buy them a steak dinner if they could find any stacks on his ranch with mold in them" (18b).

Even those periods in which the DePuy machine was out of service for repairs were minor compared to the time it was on the job. Thus, the downtime claimed by the DePuys for the whole season of 1966 amounted to only

42 hours out of a total work period of eight to twelve weeks (9b).

In sum, the proofs show that the DePuy machine made good haystacks when it was working, and it worked about 90% of the time. Its shortcomings stemmed from lack of ruggedness rather than faulty concept.

The evidence also rebuts petitioner's pretension that the DePuy machine was a mere abandoned experiment, as opposed to a commercial sale and public use. Thus:

(a) The DePuy machine was negotiated for and bought in response to a commercial advertisement in *Montana Farmer-Stockman*, placed by Ezra C. Lundahl Inc. (11b).

(b) Nothing in the record, either by way of documentary evidence or testimony, suggests that the DePuy machine was contemporaneously represented by its manufacturer to be an experimental machine or so considered by DePuy, who bought it. On the contrary, the DePuys recognized from the start that the machine was sold "on a regular commercial basis" (10b), under a full warranty of fitness (14b). Confirming this, DePuy Enterprises Inc. filed a suit in early 1968 against Ezra C. Lundahl Inc. and petitioner, as its successor, seeking damages for breach of contract (14b). (The specific breaches complained of (16b) were failure to provide a self-loading attachment as promised, failure to supply new tires as promised, and failure to cure defects in the machine.)

(c) In defending the DePuy lawsuit, the Lundahl company did not plead that the transaction involved an experimental machine. On the contrary, Ezra C.

Lundahl Inc. acknowledged its liability for the machine's structural shortcomings by paying \$2,999 in settlement of DePuy's claim (13b).

(d) Neither Cordell Lundahl nor his attorney Lynn G. Foster considered the DePuy machine experimental. On the contrary, Lundahl was so concerned about petitioner's failure to file a patent application in his behalf before the first anniversary of the DePuy sale that he consulted Foster for advice, and was told that the DePuy sale might well raise a statutory bar against any later patent application that Cordell Lundahl might file. Foster, in fact, testified (7b):

"If it had been my understanding that Hesston had declined to file prior to the DePuy anniversary, I would have taken drawings and prepared the application myself."

In sum, the contemporaneous evidence proves that the sale and public use of the DePuy machine occurred in the ordinary course of business rather than as part of an experimental project.

Within a few months after petitioner took over the business of Ezra C. Lundahl Inc. on August 1, 1966, a prototype haystacking machine embodying Cordell Lundahl's concepts had been completed, and in early 1967 it was field-tested in Arizona and Florida (A5). That prototype wagon included pressing components, a hay pickup device, an elevator for carrying the hay into the wagon, a structure for spreading the hay evenly, a tailgate that could be opened to unload the formed stack, and a device for pushing the formed stack out of the wagon and onto the ground (A5-A6).

In mid-1967 petitioner's engineer Garrison, who had helped Lundahl complete the aforementioned 1966-67 prototype machine, returned to petitioner's Kansas headquarters to design a haystacking wagon for commercial manufacture that would be "functionally equivalent although structurally different" from the Lundahl 1966-67 prototype (A6). In carrying out that assignment, Garrison improved certain features of the earlier Lundahl wagon, and his version of the machine had been reduced to practice by the fall of 1968 (A6).

Although Lundahl's concepts and wagon development had antedated all of Garrison's work, the first patent application filed by petitioner was a Garrison application directed to his second-generation haystack-forming wagon (A6). Moreover, in prosecuting that initial Garrison application, petitioner failed to disclose to the Patent Office the facts concerning the prototype Lundahl stacking wagons and their role as the starting point of Garrison's work (A6).

Similarly, in prosecuting the Lundahl applications, the first of which was filed in November, 1969, petitioner never disclosed to the Patent Office the 1966 sale and public use of the DePuy machine, which—apart from its lack of an automatic pickup mechanism—was essentially the same haystack-forming wagon that the Lundahl patent applications disclosed and claimed (A9, A24-A25).

On the facts as above recounted, the District Court rightly held (a) that the DePuy machine was legally prior art against both the Lundahl and the Garrison applications (A24), (b) that petitioner, Lundahl, and Garrison were all familiar with the DePuy machine and its

possible implications for subsequent patent applications (A25), (c) that the Garrison and Lundahl patents were "unpatentable in light of the sale of the DePuy machine more than one year prior to the filing of the patent applications" (A25), and (d) that the 1966-67 Lundahl prototype machine was, relative to the Garrison applications, prior art which should have been disclosed to the Patent Office (A18).

On the basis of those findings, taken with the other prior art, the District Court analyzed the claims in suit to determine what the patents covered (A19), pointed out that the structural elements claimed in petitioner's patents were all individually old (A20-21), and held that those old elements, when combined as they are in petitioner's patents, "continue to function in the same capacity as they did outside Hesston's combinations", without performing any "new and different function" (A23-24). Thus analyzed, petitioner's patents were plainly invalid as a matter of law, and the District Court so adjudged them (A25-A26).

In sum, petitioner is wrong in contending (p. 9) that the judgment below resulted from "unorthodox and legally incorrect . . . approaches to the question of patentability". On the contrary, petitioner's patents were held invalid for an orthodox reason—namely, that their subject matter was found, as a matter of fact, to be obvious in view of the prior art.

## ARGUMENT

---

As we have just shown, the record rebuts petitioner's contention that the judgments below resulted from errors of law. The courts below adhered scrupulously to the law as spelled out in *Great A. & P. Tea Co. v. Supermarket Equipment Corp.* (1950), 340 U.S. 147, 152, and as restated in *Graham v. John Deere Co.* (1966), 383 U.S. 1, 3, 5-6, *Anderson's-Black Rock Inc. v. Pavement Salvage Co.* (1969), 396 U.S. 57, 61, and *Sakraida v. Ag Pro, Inc.* (1976), 425 U.S. 273, 280-281.

This case, like each of those famous precedents, involves patents "for a combination which only unites old elements with no change in their respective functions" (*A. & P.*, 340 U.S. at 152); hence, the cited cases govern the present one.

Without any real application to this case is petitioner's long argument (pp. 12-15) wherein it asks this Court to echo the Seventh Circuit\* and reject synergism as a standard for determining whether a combination of old elements may be patented. First off, petitioner's patents were held invalid because "the differences claimed in the Hesston patents in issue would be *obvious* to one reasonably skilled in the art" (A23); the absence of synergism was accorded only secondary attention. And, secondly, petitioner errs (as did the Seventh Circuit in *Republic*) in assuming that synergism, as a concept in patent law, is relevant only in connection with interpretation of the obviousness statute, 35 U.S.C., §103.

---

\* *Republic Industries, Inc. v. Schlage Lock Co.* (7th Cir., 1979), 592 F.2d 963.

In truth, it is the *Constitution* which forbids the grant of a patent on a combination of old elements that perform only their known conventional functions, without any "synergistic result". This Court so held in *Anderson's-Black Rock Inc. v. Pavement Salvage Co.* (1969), 396 U.S. 57, 61, wherein this Court, in a unanimous opinion wrote:

"The patent standard is basically constitutional, Article I, §8, of the Constitution authorizing Congress '[t]o promote the Progress of . . . useful Arts' by allowing inventors monopolies for limited times. We stated in *Graham v. John Deere Co.*, 383 U.S. 1, 6, that under that power Congress may not 'enlarge the patent monopoly without regard to the innovation, advancement or social benefit gained thereby. Moreover, Congress may not authorize the issuance of patents whose effects are to remove existent knowledge from the public domain or to restrict free access to materials already available. Innovation, advancement, and things which add to the sum of useful knowledge are inherent requisites in a patent system which by constitutional command must "promote the Progress of . . . useful Arts." This is the standard expressed in the Constitution and it may not be ignored.'" (Emphasis in original.)

In *John Deere* (1966), 383 U.S. 1, 5-6, this Court explained thus the restraint imposed upon the powers of Congress by Article I, §8, cl. 8, of the Constitution:

"The clause is both a grant of power and a *limitation*. This qualified authority, unlike the power often exercised in the sixteenth and seventeenth centuries by the English Crown, is limited to the promotion of advances in the 'useful arts.' . . . The Congress in the exercise of the patent power *may not overreach the restraints imposed by the stated constitutional purpose.*"

This Court added (383 U.S., at 6):

"Within the scope established by the Constitution, Congress may set out conditions and tests for patentability. . . . It is the duty of the Commissioner of Patents and of the courts in the administration of the patent system to *give effect to the constitutional standard* by appropriate application, in each case, of the statutory scheme of the Congress."

The lesson clearly taught by *John Deere* and *Black Rock* is that §103's restriction of patentability to non-obvious subject matter is an "additional condition" which a patent must satisfy to pass judicial muster, *over and above* the requirements for invention imposed by the Constitution (*John Deere*, 383 U.S. at 17). In other words, a patent must be held invalid without any inquiry into obviousness if it fails to pass the *Constitutional* test (i.e., lacks synergism, in the case of a combination of old elements). And, even if a patent does pass the Constitutional test, it still, under §103, must be held invalid unless it *also* meets the statutory requirement of non-obviousness.

Of no greater worth than petitioner's argument on synergism is its argument (pp. 15-19) concerning the law of experimental use and sale. In that context, petitioner condemns the courts below for according to the DePuy machine the status of prior art. The right thing to do, petitioner says, would have been to declare the DePuy machine an "abandoned experiment".

In so arguing, petitioner assumes that the decisions below concerning the DePuy machine stemmed entirely from reliance on *Robbins Co. v. Lawrence Mfg. Co.* (9th Cir., 1973), 482 F.2d 426, 433, wherein it was held, in construing 35 U.S.C., §102(b), that a sale will raise a statu-

tory bar "unless the contract of sale or the offering for sale contains an express or clearly implied condition that the sale or offering is made primarily for experimental use". (Emphasis in original.)

The District Court did, it is true, cite and quote from *Robbins* (A25); but the Court of Appeals made no reference to it. And, more importantly, it is plain as day that the District Court's finding that the DePuy sale was a business transaction, as opposed to an experiment, was based on far more evidence than just the terms of the advertisement and sales contract. (See pp. 5-9, *supra*.)

In short, this case certainly doesn't turn on the issue whether *Robbins* or *Yarn Processing*\* states the better rule for determining when a sale is commercial as opposed to experimental. The DePuy sale was plainly a commercial transaction, whichever one of those precedents be followed.

Finally, petitioner (pp. 19-21) again ignores the record in accusing the District Court of disregarding the individual claims in suit; the District Court *did* consider them, and summarized their recitals in its opinion (A19).

---

\* 498 F.2d 271, 287 (5th Cir., 1974)

### CONCLUSION

---

This is a routine patent case which was decided on its facts, with no novel or disputed point of law involved. Nothing in it calls for this Court's attention, and the petition for writ of certiorari should be denied.

Respectfully submitted,

DUGALD S. McDougall  
THEODORE R. SCOTT  
135 South LaSalle Street  
Chicago, Illinois 60603  
*Attorneys for Respondent*

### APPENDIX

#### *Testimony of Lynn G. Foster*

##### *Direct Examination*

By Mr. McDougall:

Q. Where do you reside, Mr. Foster? A. 625 Northcrest Drive in Salt Lake City.

Q. What is your profession? A. I'm a patent attorney.

Q. Are you a member of the bar of the State of Utah? A. I am.

Q. Are you admitted to practice before the United States Patent Office? A. I am.

Q. Just by way of background, how long have you been a lawyer, Mr. Foster? A. Since 1964.

Q. Have you practiced throughout that period in the City of Salt Lake City? A. No.

Q. Where did you commence your practice? [1721] A. I practiced for something over a year in Michigan.

Q. And then came out to Salt Lake City? A. I was with Judge Smith's old law firm in Dearborn.

Q. Oh, yes. This is the man who later went to the Court of Custom and Patent Appeals.

The Reporter: What was the Judge's name?

A. Judge Arthur Smith.

Q. (By Mr. McDougall) I take it you're also a member of the bar of Michigan? A. I am.

Q. Will you give the Court a summary of your education beyond the high school level, and tell us where you went to law school, and so forth. A. Yes. I was a student at Brigham Young University in their engineering curriculum for a period of years. My anticipated curriculum there was somewhat protracted, because I also played intercollegiate baseball. BYU at the time was having some difficulty obtaining accreditation for that particular school. So as a result of some encouragement from others, I transferred to the University of Michigan; grad-

*Testimony of Lynn G. Foster*

uated from the University of Michigan in 1959, Tau Beta Pi, in their engineering program.

Q. Let me interrupt you. Is Tau Beta Pi an honorary society? A. Yes.

[1722] Q. Go ahead. A. I intended to enroll immediately in law school and had been accepted by several law schools; but because of the increasing size of my family, I found it necessary to work for a period of time and ultimately enrolled in George Washington University and graduated there with a law degree.

Q. George Washington University is located at Washington, D. C. A. Correct.

Q. Were you doing work that was in any way related to patents during the period that you were in law school? A. I was an employee of the U. S. Patent Office for about a year and a half; and then I worked a patent law firm, primarily preparing patent applications and amendments to patent applications for about a year and a half.

Q. So from a practical point of view, you were advancing your patent knowledge while you were in law school? A. Yes. I was reasonably well trained by the time I graduated.

Q. Very good. From the fact that you started your college career at Brigham Young, I take it that you are a native Utahn? That is to say, you didn't come out here recently? You grew up out here, did you not?

[1723] A. No, I did not. I'm from Idaho.

Q. Are you? Now, what was the first occasion that you can remember on which you became acquainted with either Ezra or Cordell Lundahl? A. To the best of my recollection, I first met Cordell when he came to my office for some assistance on a 1966 agreement and assignment matter with the Hesston people. He needed some contract interpretation.

Q. Did you meet Cordell's father Ezra on that occasion? A. At about the same time. I can't remember whether on first meeting they came together.

*Testimony of Lynn G. Foster*

Q. At that particular time that you were first consulted by Cordell Lundahl, was there any element of dissatisfaction with Hesston expressed, or was it just a case of trying to do a lawyer's job with contracts? A. Well, the contract, the 1966 agreement between the Lundahls and Hesston had been consummated by execution, and I wasn't involved in that at all. This was either very late in 1966 or in January of '67 more or less. And there was—

Q. Well, now, Mr. Foster, I recognize that there are areas of privilege which you may prefer not to go into, and I don't want to ask you to go into them; but to the extent you are fairly certain that the events are known to [1724] the third party anyway, will you please tell the Court briefly what it is that was troubling Cordell Lundahl when he came to see you and what specifically you did about it. A. Cordell was concerned about what his duties and obligations were under the '66 agreement with Hesston, and also what their duties were, and particularly in respect to seeking and obtaining patent protection on the bulk hay wagon.

Q. What did Cordell say to you with respect to Hesston's action or lack thereof on that subject up to that point? A. Well, we discussed his contractual concerns in terms of the DePuy sale and what that meant; and he asked me for assistance in determining what under the contract he could do and what under the contract Hesston was obligated to do in regard to timely seeking patent protection on the DePuy development.

Q. Now, Mr. Foster, there has been a testimony—and, incidentally, the record will make it clear on this, you are still representing the Lundahls, are you not? A. I am.

Q. In that capacity have you attended a good many, at least, of the sessions of trial, the ones at all events in which your clients were testifying [1725] A. I have.

Q. Now, you have heard reference made by Cordell, then, and by other witnesses, as well, I think, to the

*Testimony of Lynn G. Foster*

thought that getting valid patent protection on this stacking hay wagon might be intimately related to whether it was filed within a year after the sale of the DePuy wagon. You've heard such testimony, I'm sure. A. Oh, yes.

Q. Tell me, what is the fact as to whether Cordell's feelings in that respect were influenced in any way by advice from you? A. Well, I'm sure that Cordell's point of view was influenced by what I had to say.

Q. Did you tell him that you thought it made a great deal of difference in the probable validity of any patent protection that could be secured as to whether it was filed?

Mr. Schmidt: A leading question—

Mr. McDougall: I just asked him, your Honor, what did he tell him. All right. I withdraw the question, your Honor. I certainly don't want to lead Mr. Foster. On the other hand, I think he can take care of himself, your Honor. He certainly is qualified.

Q. (By Mr. McDougall) What, if anything, to the extent that you feel you can without having a privilege [1726] problem, what if anything did you tell Cordell were your own views of the law in regards to this matter of the criticality of the July 1, '67 date? A. Well, first of all, Cordell spent a good deal of time educating me on the technology of handling hay. This was the first time within my technical experience and my legal experience that I had had anything really to do with hay in depth, apart from using a pitchfork when I was a boy.

And it was Cordell's judgment sometime around or shortly after the first of the year, 1967, that the most significant part of his work on bulk hay was what has been referred to as the vertical compaction or the overhead press, whatever, in this trial. And, therefore, my expression, little opinion, was based upon Cordell's indication that that was the significant part of the work he had done. And I said, "Obviously, that was part and parcel

*Testimony of Lynn G. Foster*

of the machine sold to DePuy, albeit there might be some justification in one competent in the law assuming that still there were experimental aspects to that machine, still it was a sale." And under Section 102 of the statute, there can accrue a statutory bar as a result of a sale. My position on it was, "You're better off to be safe than sorry." And since there was ample time remaining, why not file?

[1727] Q. Now— A. May I continue?

Q. Oh, please. I'm sorry. I thought you had stopped. It was a just a pause. A. Well, I had stopped on that thought. The next question was whether or not we could file, or if Hesston had to. And I made a review of the contract just briefly, and it was my opinion that Cordell had no right to file until this matter had been presented to the Hesston people and that they had either said, "Yes, we will file," or, "No, we won't."

In the event that they said they would not file, we would then, based upon my interpretation of the contract, have been entitled to file in our own right. And because of that state of affairs, and to insure that the matter was timely handled, the Ramada Inn meeting was scheduled.

Q. My next question was going to be about that subject. You've heard other witnesses say you were there. Is it a fact that you were there? A. I was.

Q. Did you, as Cordell testified, pretty much act as the spokesman for the Hesston interest—pardon me—the Lundahl interests? A. Yes, I did.

Q. Did Mr. Schlichting or anyone else representing [1728] Hesston make a statement to you at that meeting along the lines of his testimony today to the effect that Hesston disagreed with the view that the DePuy wagon posed a threat of a statutory bar? A. No. My recollection of the meeting—and, mind you, it was a long time ago, and I don't remember exact words. All I remember about it is the mental impressions that I carried away from the meeting. I recall nothing about either side talk-

*Testimony of Lynn G. Foster*

ing in any great detail about whether we had strong views on the statutory bar or we didn't.

The subject of the DePuy sale was mentioned. So that everybody understood that that was the deadline that we were concerned about. I don't remember the Hesston people saying, "We disagree, we don't consider it a deadline." But on the other hand, I don't remember that they agreed. It seems to me that they were somewhat noncommittal on the question.

Q. Well, now, I'd like to ask just one more question about the Ramada Inn meeting. It's been aired by several witnesses, and I don't think we need to go over it all again. But tell me, Mr. Foster, what impression you had from the Hesston people at the time the meeting broke up with regard to their intentions. A. Well, if I might narrate just a little—

Q. Please do. [1729] A. I knew Gordon Schmidt personally, because we had prior dealings on another matter. And so upon coming into the room, I greeted him as a fellow member of the bar whom I knew. I did not know the other two gentlemen, but came later to recognize Mr. Schlichting. I understand the other was Merele Helferich, but I wouldn't know him if he walked in the door now.

So I don't remember anything about it. And I don't remember that he took any real active participation in the meeting. I remember my concern about the meeting. The reason for the meeting was to precipitate a decision. And we had gone far enough so that I had taken the liberty—and I have them in my hand now—of preparing Patent Office Bristol board drawings on this development.

And that was at considerable expense. They were prepared on a special kind of paper in India ink by a person who has to be quite competent.

And as a result of our discussions as to whether or not a patent application would be filed and whether or not Hesston would do it or we would do it, I was left

*Testimony of David W. DePuy*

to the clear impression that Hesston had made a commitment to do it. And I offered to Mr. Schmidt this set of Bristol boards, saying, "would you like these, so that you might by using them save some time?" And he declined to accept them, feeling that he would prefer to have his own subcontractor [1730] or employee prepare them.

But I can assure you that I would not have offered these drawings had I not had the understanding that an application was going to be prepared by Hesston. If it had been my understanding that Hesston had declined to file prior to the DePuy anniversary, I would have taken drawings and prepared the application myself.

DAVID W. DEPUY

called as a witness on behalf of the defendants, having been heretofore duly sworn, resumed the stand and testified further as follows:

*Cross-Examination*

By Mr. Scott:

• • •

Q. Now, you testified about some of the work that was done on the machine when you had some problems with it and you were referring I believe to a letter, which is in evidence as Exhibit 20-A, that is Deere Exhibit 20-A when you were discussing that, were you not? A. Yes.

Q. What that amounts to is you found that the sides of the wagon had to be reinforced and that you had to put that bar across the end to keep the two sides from spreading apart? A. Right.

Q. And you had to do work to reinforce the tailgate as well? A. Yes.

Q. And is this the only piece of farm equipment that your father has ever owned that you ever had to do any repair work on? A. Oh, I wouldn't say that.

Q. How many acres of hay did you put up with that [2215] wagon you bought from the Lundahls during the 1966 haying season? A. I don't know the exact acre-

*Testimony of David W. DePuy*

age. It seems to me that it was somewhere in the vicinity of 300, but it has been so long since I have worked that ground I couldn't tell you for sure.

Q. How many days would you say you used the wagon during the 1966 haying season to put up approximately 300 acres of hay? A. We started sometime the first part of July, and if I recall correctly we were done with the first cutting sometime toward the middle of August, and that hay wagon wouldn't have been used every day during that time. And then there was a time that it was used in September when we stacked the second cutting of alfalfa, there wasn't too much of that. As to the exact number of days, I don't know.

Q. But in the first cutting it was about 30 days from start to finish, although you say the wagon was not used every one of those days? A. It was somewhere between four and six weeks that we used that wagon as near as I can remember.

Q. And that would be for both cuttings? A. No, for the first cutting.

Q. For the first cutting? A. Yes.

[2216] Q. And then the second cutting, can you estimate how many days? A. No, I don't remember. I know we put up a second cutting with it and that's all I can remember.

Q. And in the course of the first cutting was it then that you had most of these problems that had to be solved by these reinforcement-type repairs that you made? A. When we initially started there were some problems that had to be taken care of at that time, and then problems developed as the machine was used. I was very careful with the machine not to exert too much pressure on anything because it could have been broken at any time if I had been careless.

Q. Essentially you found that the machine exerted more compression on the hay than the sides, the tailgate was designed to take, that was the problem? A. That's correct.

*Testimony of David W. DePuy*

Q. So you had to beef up the sides and the tailgate? A. Even then you had to be careful with it.

Q. Now, in this letter 20-A, Exhibit 20A, I notice that there is the statement that, "Because of mechanical failure plaintiff claims he had 42 hours of down time in 1966." Does that accord approximately with your recollection and— A. I kept no log of the time that—but I know there [2217] was considerable time that the machine was down. As to the hours, I don't know.

[2218] Q. So 42 hours of down time out of four to six weeks of operation in the first cutting and whatever time the second cutting took? A. Uh huh.

Q. Is that about right? A. It seems to be a reasonable estimate. It could have been more. I don't know at this time.

Q. Well, it's the position that the plaintiff was asserting in the lawsuit, is it not? A. That's correct.

Q. What about the use of the machine during the 1967 haying season? Were you still working there in 1967? A. No. No. I passed the bar exam in 1966, in the latter part of October, and I never ran the machine. I was never near it until last Friday.

Q. Do you know whether or not it was used again during the 1967 haying season? A. Yes, I seen them working, using it in the hay fields.

Q. Who operated it that season, if you know? A. It's my understanding that my other brother-in-law, Fred Walker, operated it, but I don't know whether he operated it exclusively or part of the time.

\* \* \*

Q. Did you yourself see the ad that appeared in the February 1966 issue of the Montana Farmer-Stockman? That's Deere Exhibit 136. A. I remember my father showing an ad in the Montana Farmer-Stockman. As to which issue of the magazine it was, that I don't know.

Q. Do you recall that it was the ad which I am now placing in front of you, regardless of the issue in which it appeared? A. I am not certain it was that particular ad. It was [2221] an ad, and my recollection was that it was a larger ad, but even this I'm not sure of.

*Testimony of Warren A. DePuy*

Q. Well, this text which reads, "Same wagon compresses loose hay into neat uniform stacks without any manual handling, complete year-round loose hay program, wagon will also stack and compress loose hay from the windrow," does that sound like a description of the same machine that you saw advertised? A. Yes. Uh huh.

Q. And you understood that that machine was being sold on a regular commercial basis? A. That was my understanding at that time, yes.

Mr. Scott: That's all the cross-examination we have, your Honor.

\* \* \*

**WARREN A. DEPUY**

called as a witness on behalf of the defendant, being first duly sworn, testified as follows:

\* \* \*

[2222] *Direct Examination*

By Mr. Schmidt:

Q. I do. Where do you live? A. What? Where do I live?

Q. Yes. A. I live approximately seven miles in a southerly direction from Livingston, Montana.

Q. Is that in a town or on a farm or ranch or what? A. On a ranch.

Q. How long have you lived there? A. Since about 1906.

Q. What kind of a ranching operation do you carry on there? A. It is a cow ranch primarily and with some timber growing and some recreation facilities.

Q. Do you own or operate your own ranch? A. What?

Q. Do you own or operate your own ranch? A. Yes, sir.

Q. What kind of haying operation do you carry on on that ranch? A. We raise mostly grass hay. Some alfalfa is planted for reseeding, but it doesn't last too long. And we put up this hay in the summer, and then we distribute it to the cattle in the winter.

*Testimony of Warren A. DePuy*

[2223] Q. Are you the father of David DePuy? A. Yes, sir.

Q. Did you hear his testimony this morning? A. I did.

Q. Are you familiar with the so-called Lundahl haying wagon? A. Well, I am.

Q. How did you come about acquiring that wagon? A. I saw an advertisement. I can't recall exactly—maybe a—what paper it was in. But then I contacted them, and they sent some literature and so forth, and I purchased it.

Q. Would you please look at Deere Exhibit 136 and tell me whether or not that was the ad that you saw.

A. I'm not sure. I saw an ad, but that's been a long time ago, and it might have been a different ad. I mean, in a different paper. I'm not positive that I looked at that particular ad.

Q. Did you see an ad of that nature? A. Yes. Definitely.

Q. About when was that? A. Sometime in the fore part of 1966.

Q. Now, how did you place your order for that machine? A. Well, I had got their literature, and then there [2224] was some correspondence, and I placed it—they told me that they wouldn't be able to supply only part of the machine; that the part of the machine that picked up the hay out of the window and elevated it up and placed it into the hay wagon would not be available on a commercial scale until the following year.

I then ordered it, with the understanding that—and they told me I could place this hay in and get by in a pinch with a farmhand. And I ordered it with the understanding that this pickup contraption or machine that went on the head of it would be available before the following haying season.

Q. Do you recall approximately when this machine was then delivered to your ranch? A. Sometime in July. They notified me they were going to be late because they were adding an improvement, some kind of a compres-

*Testimony of Warren A. DePuy*

sion bar, and that it would be delivered, and it was delivered sometime in July.

Q. Did you take part personally in using that machine or using the Farmhand loader in 1966? A. Yes. I—that was my end of the work—delivering the hay up to it in the Farmhand, elevating it, and dumping it into the hay box.

Q. Do you recall who operated the wagon itself? A. My son David operated the wagon.

Q. Did that continue throughout the 1966 haying season? A. Yes.

[2228] Q. Now, I am not sure that you have said one way or another as to whether or not that machine was used in the 1967 hay season. A. Yes, it was used some, but not much.

Q. And by whom? Who used it? A. Well, one party I believed his name was Fred Walker.

Q. And what did he operate, the Farmhand? A. No, he operated the other. The Farmhand I pretty well took care of that.

Q. You took care of it as well in '67? A. Yes.

Q. What were your experiences by way of the performance of that machine in 1967? A. Well, it just phased—we just had to phase it out.

Q. Well, what were the difficulties? A. Well, one of the difficulties is the tailgate had a huge bar so big I guess (indicating), and when you compressed against it the bar got a circle into it and had to be straightened, and that didn't hold.

And another thing, it was a dangerous thing that when they opened it up they had a little bar like that is on the brakes, a little wheel like on the brake of an old time boxcar, and they twisted—you twisted that and unhooked the chain, and then you had to get—there was a lever then [2229] that worked on the cam that let this big bar out, and you pulled it around to let your hay out. Well, that was—had to be a pipe used for—an extension handle to push that in, and it flew in all directions and it was not a safe situation.

• • •

*Testimony of Warren A. DePuy*

Q. (By Mr. Schmidt) What did you mean by phasing out the machine? A. Well, we just went to putting up our hay in another method.

Q. When did you do that? A. When?

Q. When did you phase out the machine and—A. '67.

Q. About what time of the year? [2230] A. Oh, I suppose in July or August, I don't remember exactly. That's a long time ago.

• • •

Q. Now, to your own personal knowledge do you know what happened to that lawsuit? A. What happened to it? It was settled.

Q. And in what manner, do you know? A. Well, I received a certain amount of money and the attorneys received their amount of money and I retained possession of the machine.

Q. From whom was that money received? [2232] A. I suppose it was from Lundahl, it was paid—I don't know, but it was paid to me and the attorneys. I believe Lundahl's attorneys paid my lawyer, or some such thing.

Q. You now have before you Hesston Exhibit R-9, Hesston Exhibit R-10, Hesston Exhibit R-11, Hesston Exhibit R-12, Hesston Exhibit R-13, and Hesston Exhibit R-14. Now, will you note for me please in Hesston Exhibit R-9 a letter dated April 5, 1971, the language which reads in the first paragraph, quote, under the settlement Mr. DePuy will keep all of the machinery, quote.

Do you note that? A. Yes.

Q. What does that mean, "keep all of the machinery," to your personal knowledge? A. It would mean keeping that hay wagon and that was all the machinery that was connected with this.

Q. Did you in fact keep the hay wagon? A. Yes.

Q. And you will note in the next paragraph, "We will be forwarding the draft in the amount of \$2999, plus a release and stipulation of dismissal in approximately ten days." Did you in fact receive—A. I did.

Q. —the \$2999? [2233] A. I—my attorney took his fee out of that.

IN THE

DISTRICT COURT OF THE SIXTH JUDICIAL  
DISTRICT OF THE STATE OF MONTANA,  
IN AND FOR THE COUNTY OF PARK

\* \* \*

No. 12590

DePUY ENTERPRISES, INC.,

*Plaintiff,*

vs.

EZRA C. LUNDAHL, INC.,

*Defendant.*

AMENDED COMPLAINT

Comes now the plaintiff, as and for an Amended Complaint herein against the defendant, alleges as follows:

I.

That the defendant is a corporation periodically doing business within the State of Montana.

II.

That prior to June 22, 1966, the defendant, Ezra C. Lundahl, Inc., advertised for sale in various farm publications having a general circulation in the State of Montana, a mechanical haywagon, showing that the same was to have an automatic pickup for loose hay.

III.

That plaintiff became interested in purchasing the product as advertised, and requested of the defendant literature thereon.

IV.

That the defendant forwarded literature to the plaintiff representing and warranting the fitness of the product for the uses intended, and further warranting and representing the capabilities of said equipment.

V.

That relying on said representations and warranties, the plaintiff on June 22, 1966, ordered said equipment, specifying with the order that it was understood that the self-loading attachment would fit the haywagon ordered and that it would be available for the 1967 hay crop, and paying \$1,000.00 thereon as a down payment; that thereafter the defendant represented to plaintiff that the equipment could be delivered in July of 1966, and further, that a representative of the company would accompany the delivery of the equipment to instruct the plaintiff in its use, and further, to make whatever repairs or adjustments were necessary.

VI.

That representatives of the defendant did, in fact, accompany the delivery of the equipment to Livingston, Montana, and attempt to instruct the plaintiff in use thereof.

VII.

That, at Livingston, Montana, when representatives of the defendant were present, the defendant again represented the capabilities of the equipment and did further warrant the fitness thereof for the intended use, and did assure the plaintiff that the self-loading attachment would be available for the hay season of 1967, and the defendant further warranted and agreed to make further adjustments to the said equipment so that it would accomplish the purposes for which it was intended, and further agreed to place new tires thereon in place of the used ones which were thereon when it was delivered.

VIII.

That, relying on such representation, on July 17, 1966, the plaintiff paid to the defendant the balance of the purchase price of the haywagon which was delivered, in the amount of \$3,500.00.

*Deere Exhibit 18*

**IX.**

That the defendant on numerous other occasions since July 17, 1966, has represented and warranted to the plaintiff that deficiencies in the equipment would be cured and corrected.

**X.**

That the representations as to fitness of the equipment for the purposes for which it was intended, the representations of the defendant to cure such defects, to deliver new tires, and to furnish automatic loading equipment by the hay season of 1967, were false and fraudulent, and were made with no intention to perform the same or any thereof, and with the intention not to perform the same, and the defendant has in all respects failed to abide by its agreement or to produce under its warranties, and such equipment has not, does not, and will not perform the functions attributed to it by the defendant, and the hay-loading attachment which was agreed to be furnished for said equipment by the hay season of 1967, has not even been manufactured, and was clearly not manufactured by the hay season of 1967, or at all, and has never been delivered to the plaintiff.

**XI.**

That as a result of the defendant's false and fraudulent representations, the plaintiff has been damaged in the sum of \$4,500.00, the purchase price of said equipment, which equipment plaintiff herewith tenders to the defendant.

**XII.**

That as a result of the false and fraudulent representations of the defendant, and plaintiff's reliance thereon, plaintiff has been unable to use such equipment and has been required to purchase and rent other equipment, and has suffered damages for time during which atten-

*Deere Exhibit 18*

tion was delivered to said machine and other work was not done, and purchase repair equipment, and suffered damage in loss of hay, and suffered general damage in the full amount of \$5,670.00.

That in all respects, defendants' actions toward plaintiff have been oppressive and vexatious, and defendant therefore ought to pay to the plaintiff the sum of \$10,000.00 as punitive damage, and by way of example.

WHEREFORE, plaintiff prays judgment against the defendant as follows:

**I.**

For the sum of \$4,500.00 as refund of the purchase price of said equipment.

**II.**

For the additional sum of \$5,670.00 general damages.

**III.**

For the sum of \$10,000.00 punitive damages.

**IV.**

For such other and further relief as to the Court may seem just and proper.

**V.**

For plaintiff's costs and disbursements herein incurred.

/s/ Lyman H. Bennett, Jr.

---

Lyman H. Bennett, Jr.  
24 West Main Street  
Bozeman, Montana 59715  
Attorney for Plaintiff.

*Testimony of Cordell Lundahl*

[1500] EZRA CORDELL LUNDAHL, called as a witness on behalf of the plaintiffs, having been heretofore duly sworn, testified further as follows:

*Direct Examination*

By Mr. McDougall:

[1515] Q. Tell the Court everything you can recall in chronological order about trips that, a trip or trips, that were made by you to Livingston, Montana, to the DePuy ranch at which Hesston people were in your company.

A. Well, I know that there was—there was one time that we went up in Hesston's airplane.

[1516] Q. You mentioned the Hesston Company airplane. Were all of the trips made in that airplane, or were there other ways that you used to get up there?

A. I think we drove once, and I think we went once in my airplane. I tried to make it a point to take everyone that was involved in Hesston. One of the things that they were concerned about was the high amount of moisture that we were putting the hay up with; and I can remember that they asked Mr. DePuy if he had any stacks that went moldy as a result of this high moisture, and he made a statement at that time that he would buy them a steak dinner if they could find any stacks on his ranch with mold in them.

[1517] Q. The next question is, did the Hesston people in your presence see any of the hay stacks which DePuy had made with your machine?

A. Yes, sir.

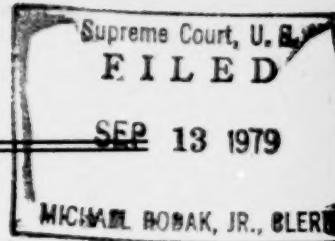
Q. You just testified on at least one occasion he used a grapple fork and opened up a stack to show the condition of hay.

A. Yes, sir.

Q. Did it prove to be good or bad, as you remember?

A. Well, it was good. Or, we would have had a steak dinner.

79-1831



In The  
**Supreme Court of the United States**  
OCTOBER TERM, 1979

**No. 78-1381**

HESSTON CORPORATION,  
*Petitioner*,  
vs.  
DEERE & COMPANY,  
*Respondent*.

**SUPPLEMENTAL AND REPLY BRIEF  
FOR PETITIONER**

GORDON D. SCHMIDT  
WARREN N. WILLIAMS  
1400 Mercantile Tower  
1101 Walnut Street  
Kansas City, Missouri 64106  
*Counsel for Petitioner*

## INDEX

New Cases on Synergism Question .....	1
The Constitution Sets No Conditions or Tests for Patentability .....	2
Synergism Conflict Must Be Resolved .....	3
Experimentation Conflict Must Be Resolved .....	4
Patentability of Combination of Old Elements Must Be Resolved .....	5
Conclusion .....	6

### Appendix—

Decision in Champion Spark Plug Company v. The Gyromat Corporation, ..... F.2d ....., No. 78-7556 (2nd Cir. July 2, 1979) .....	A1
Decision in Plastic Container Corporation v. Continental Plastics of Oklahoma, Inc., ..... F.2d ....., No. 77-1753 (10th Cir. August 8, 1979) ....	A25

## Citations

### CASES

<i>Anderson's-Black Rock Inc. v. Pavement Salvage Co.</i> , 396 U.S. 57, 90 S.Ct. 305, 24 L.Ed.2d 258 (1969) .....	3
<i>Champion Spark Plug Company v. The Gyromat Corporation</i> , ..... F.2d ....., No. 78-7556 (2nd Cir. July 2, 1979) .....	1, 2, 5, 6
<i>Deere &amp; Co. v. Hesston Corp.</i> , 593 F.2d 956 (10th Cir. 1979) .....	2
<i>Graham v. John Deere Co.</i> , 383 U.S. 1, 15 L.Ed.2d 545, 86 S.Ct. 684 (1966) .....	2, 3, 5, 6

<i>Great A. &amp; P. Tea Co. v. Supermarket Equipment Corp.</i> , 340 U.S. 147 (1950) .....	5
<i>Plastic Container Corporation v. Continental Plastics of Oklahoma, Inc.</i> , ..... F.2d ....., No. 77-1753 (10th Cir. August 8, 1979) .....	1-2, 6
<i>Republic Industries, Inc. v. Schlage Lock Co.</i> , 592 F.2d 963 (7th Cir. 1979) .....	2, 6
<i>Robbins Co. v. Lawrence Manufacturing Co.</i> , 482 F.2d 426 (9th Cir. 1973) .....	4
<i>Sakraida v. Ag Pro, Inc.</i> , 425 U.S. 273, 96 S.Ct. 1532, 47 L.Ed.2d 784 (1976) .....	5
<i>True Temper Corp. v. CF &amp; I Steel Corp.</i> , ..... F.2d ....., Nos. 76-2106, 76-2107 (10th Cir. May 31, 1979) .....	2
<i>Yarn Processing Patent Validity Litigation, In Re</i> , 498 F.2d 271 (5th Cir. 1974) .....	4, 6

CONSTITUTIONAL PROVISIONS AND STATUTES

U.S. Constitution, Article I, Section 8, Clause 8 .....	2
35 U.S.C. § 101 .....	3
35 U.S.C. § 102 .....	3
35 U.S.C. § 103 .....	3, 5

In The  
**Supreme Court of the United States**  
OCTOBER TERM, 1979

**No. 78-1381**

**HESSTON CORPORATION,**  
*Petitioner,*  
vs.  
**DEERE & COMPANY,**  
*Respondent.*

**SUPPLEMENTAL AND REPLY BRIEF  
FOR PETITIONER**

**NEW CASES ON SYNERGISM QUESTION**

Attention is respectfully called to two recent decisions, as yet unpublished, both material to the controversial doctrine of the requirement for synergistic results in patent claims calling for a combination of elements.

Reproduced in the Appendix hereof at page A1 is the decision in *Champion Spark Plug Company v. The Gyromat Corporation*, ..... F.2d ....., No. 78-7556 (2nd Cir. July 2, 1979) and at page A25 the decision in *Plastic*

*Container Corporation v. Continental Plastics of Oklahoma, Inc.*, ..... F.2d ....., No. 77-1753 (10th Cir. August 8, 1979).

In *Plastic Container*, *supra*, the court noted that the guidelines set by this Court in *Graham v. John Deere Co.*, 383 U.S. 1, 15 L.Ed.2d 545, 86 S.Ct. 684 (1966) "do not require that, for a combination of elements to be non-obvious, the result achieved by the combination must be synergistic." Cited in support are *Champion*, *supra* and *Republic Industries, Inc. v. Schlage Lock Co.*, 592 F.2d 963 (7th Cir. 1979). The court noted that its decision in the 10th Circuit *Plastic Container* case is in conflict with the prior 10th Circuit decision of *Deere & Co. v. Hesston Corp.*, 593 F.2d 956 (10th Cir. 1979) to which this Petition is directed, as well as the prior 10th Circuit decision of *True Temper Corp. v. CF & I Steel Corp.*, ..... F.2d ....., Nos. 76-2106, 76-2107 (10th Cir. May 31, 1979) (Appendix pp. A59-A60).

Therefore, with the Second Circuit (*Champion*) following the Seventh Circuit (*Republic*) and with the Tenth Circuit (*Plastic Container*) now reversing itself in support of *Champion* and *Republic*, it is essential that the synergism question in conflict among the courts be reviewed by this Court.

#### **THE CONSTITUTION SETS NO CONDITIONS OR TESTS FOR PATENTABILITY**

Respondent first raised in its Brief In Opposition the argument that, to be valid, patents must pass a so-called *constitutional* test of synergism (pp. 13, 14). On the contrary, the Congress is simply authorized by the Constitution "To promote the progress of . . . useful arts, by securing for limited times to . . . inventors the exclusive right to their . . . discoveries." Art. I, § 8, Cl. 8.

As stated by this Court in *Graham v. John Deere Co.*, 383 U.S. 1, 6, 15 L.Ed.2d 545, 550, 86 S.Ct. 684 (1966):

Within the scope established by the Constitution, Congress may set out conditions and tests for patentability.

In the 1952 Patent Act, the Congress set out the conditions in three sections: Novelty and Utility in 35 U.S.C. §§ 101 and 102; Non-Obvious Subject Matter in 35 U.S.C. § 103 (383 U.S. 1, 12, 13). None relate to or suggest a synergistic condition or test. Nor did this Court, in setting out the tests under § 103, suggest synergism as a new condition for patentability (383 U.S. 1, 17, 18).

Respondent is, therefore, plainly *wrong* in raising the argument that the Constitution sets out conditions or tests for patentability, much less a condition or test of synergism. It would be equally wrong in contending that the Congress set out synergism as a test of patentability.

To no avail, respondent quotes this Court at length from *Anderson's-Black Rock, Inc. v. Pavement Salvage Co.*, 396 U.S. 57, 90 S.Ct. 305, 24 L.Ed.2d 258 (1969), and from *Graham v. John Deere Co.* (pp. 13, 14) in support of its novel contentions. In neither instance is synergism mentioned, implied or remotely suggested as a condition or test for patentability. On the contrary, the lower courts remain confused and in dispute as to the meaning and relevancy of the "synergistic result" theory.

#### **SYNERGISM CONFLICT MUST BE RESOLVED**

Respondent does not deny that the patents in issue were invalidated for alleged failure to claim a synergistic result. It contends, however, that such ground was secondary (p. 12). To thus beg the issue presents no ground

for denial of review herein; it merely raises the novel immaterial question of primary vs. secondary bases for the decisions below.

Nothing is gained by effort to speculate as to which ground the courts below considered to be most important; the decisions provide no clue. Material only is the fact that the argument thus presented fails as a proper attack on the synergism question presented for review by petitioner.

#### **EXPERIMENTATION CONFLICT MUST BE RESOLVED**

Still another novel argument by respondent is that questions presented for review need not be considered if the Circuit Court on appeal does not specifically cite a case relied on by the District Court. The trial court selected a decision outside its circuit, *Robbins Co. v. Lawrence Mfg. Co.*, 482 F.2d 426 (9th Cir. 1973) in conflict with other circuits, including the Tenth Circuit.

The Court of Appeals for the Tenth Circuit affirmed, thereby adopting the *Robbins* rule on experimental use which conflicts fully with the rule in *In Re Yarn Processing Patent Validity Litigation*, 498 F.2d 271 (5th Cir. 1974). In its opinion, stating "prior sale or use under § 102(b) . . . (is) supported by the evidence", the Appellate Court unquestionably selected the new rule of the Ninth Circuit (593 F.2d 956, 963 (10th Cir. 1979) (Appendix to Petition p. A39).

Citation by the Court of Appeals of the case relied upon by the District Court is clearly unessential and the lack of citation is entirely immaterial to the experimental use question herein presented.

#### **PATENTABILITY OF COMBINATION OF OLD ELEMENTS MUST BE RESOLVED**

Still another argument raised for the first time in the Brief in Opposition is the controversial doctrine concerning patentability of a combination (which may, of itself be novel) of old elements (p. 12).

If, in fact, it is the rule of this Court (e.g. *Great A. & P. Tea Co. v. Supermaket Equipment Corp.*, 340 U.S. 147), that a number of elements, of themselves old, cannot be united in a new and patentable combination, then here again, that doctrine is also not being universally followed.

In *Champion*, *supra*, the Second Circuit refused to adhere to any such concept. It was observed, quite logically, that "most, if not all inventions involve a combination of old or known elements". Rejected was the contention that this Court, by dicta, in *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273, 96 S.Ct. 1532, 47 L.Ed.2d 784 (1976) overruled *Graham v. Deere*, 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545 (1966) (Appendix pp. A23-A24).

Therefore, according to *Champion*, *Graham v. Deere*, 383 U.S. 1 (1966) established that the statutory test for nonobviousness is 35 U.S.C. 103 and set forth the analytical guidelines for that test, (1) whether or not the united elements of the combination are old and (2) whether or not synergism results from the combination. Our Petition is predicated on the fact that in this case, as in many other circuits, because of confusion and misinterpretation, the courts have lost sight of the *Graham* decision and the principles therein laid down.

## CONCLUSION

This Court should now declare that it has not overruled *Graham* such that all courts can arrive at uniform decisions couched in the careful language found in *Champion, Plastic Container, Republic and Yarn Processing*, and setting forth logical, fundamental patent law concepts which have remained so highly controversial since *Graham*. There have been widely divergent interpretations of many of the decisions handed down by this Court before and after *Graham*. Such conflict with *Graham* has given rise to widespread confusion and misunderstanding. Had the lower courts below carefully considered the patent claims in issue (rather than merely "summarize" their contents as respondent admits), in light of *Graham*, the sweeping invalidity decision could not have possibly been supported by the facts. After 13 years since *Graham* it is timely once again for this Court to provide clarifying assistance and direction with respect to the questions presented by petitioner.

Respondent's arguments lend support to this Petition rather than effectively disclose any matter or ground why this cause should not be reviewed by this Court.

Respectfully submitted,

GORDON D. SCHMIDT

WARREN N. WILLIAMS

1400 Mercantile Tower

1101 Walnut Street

Kansas City, Missouri 64106

*Counsel for Petitioner*

## APPENDIX

### UNITED STATES COURT OF APPEALS FOR THE SECOND CIRCUIT

No. 823—August Term, 1978.

(Argued May 3, 1979

Decided July 2, 1979.)

Docket No. 78-7556

CHAMPION SPARK PLUG COMPANY,  
*Plaintiff-Appellee*,

-v.-

THE GYROMAT CORPORATION,  
*Defendant-Appellant*.

Before:

GURFEIN and MESKILL, *Circuit Judges*,  
and MILLER, *Judge*.\*

Appeal from the judgment of the United States District Court for the District of Connecticut (the Hon. John O. Newman, *Judge*) entered on plaintiff-appellee's action for a declaratory judgment. Following a nonjury trial, the district court declared claims 5 and 6 of defendant-appellant's patent invalid and unenforceable.

*Reversed.*

\*The Honorable Jack R. Miller, United States Court of Customs and Patent Appeals, sitting by designation.

FRITZ L. SCHWEITZER, JR., Mandeville and Schweitzer, New York, N.Y., for Appellants.

VINCENT L. BARKER, JR., Toledo, Ohio (David D. Murray and Mark C. Schaffer, Barker, Emch, Schaffer & Todd Co., L.P.A., Toledo, Ohio, of counsel), for Appellee.

MILLER, Judge:

This appeal is from the decision and judgment (unreported) of the District Court for the District of Connecticut declaring invalid and unenforceable claims 5 and 6 of U.S. Patent No. 3,219,276 ("Plural Nozzles Having Intersecting Spray and Control Therefor"), issued November 23, 1965,<sup>1</sup> to Edward O. Norris, whose rights to the patent were acquired by appellant from the Norris estate following his death in 1968.<sup>2</sup> We reverse.

*The Invention*

The invention relates to fluid (e.g. paint) spraying devices. The essential features, insofar as the involved claims are concerned, are illustrated in Figure 1 of the patent. Devices 29 are spray gun nozzles which issue a fine spray of highly charged particles (e.g. paint) toward a workpiece 44 to be sprayed. In order to spray the surface of a large workpiece, electrostatic spray guns 27 are moved up and down by means of a reciprocator slide 15. As they move up and down (in relation to a stationary source of spray fluid), the pressure of the

[Numbers of other elements of the apparatus have been deleted in the interest of simplification.]

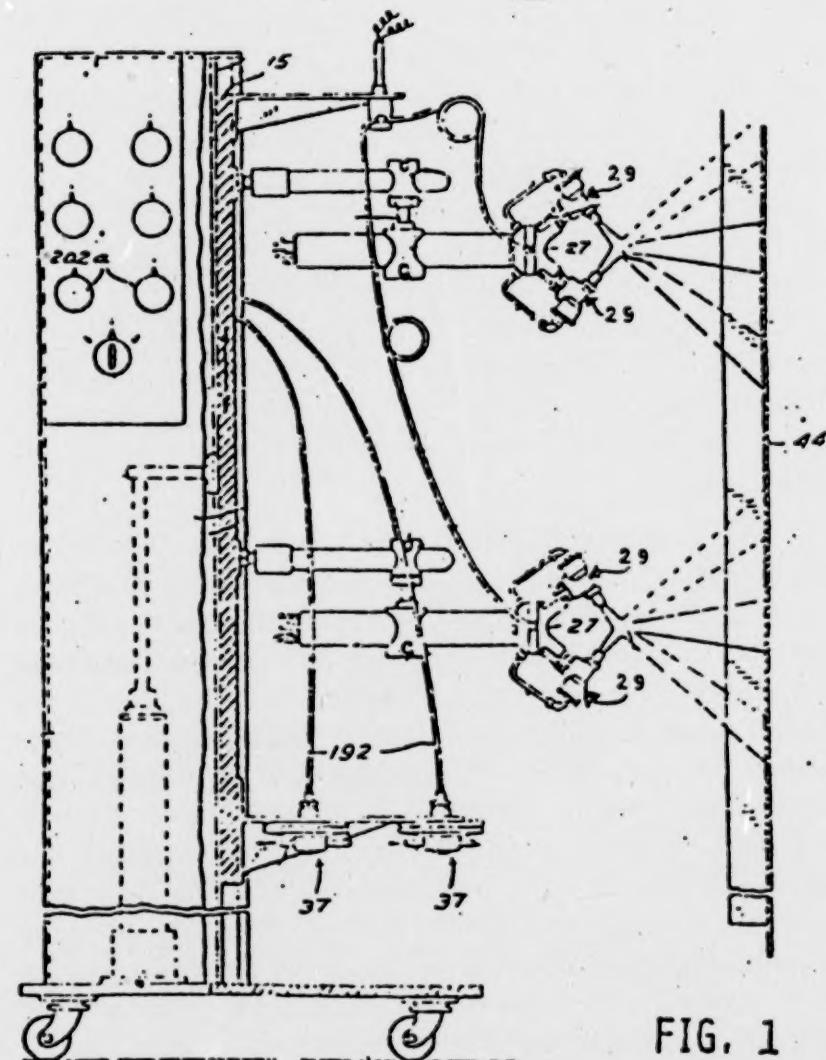


FIG. 1

1. On application No. 230,867, filed October 16, 1962. Reduction to practice occurred in late December of 1961.

2. Champion Spark Plug Company ("Champion") initiated the action for a declaratory judgment that the Norris patent was invalid and unenforceable. The Gyromat Corporation ("Gyromat") counterclaimed for patent infringement. Champion conceded infringement of the patent was valid.

spray from the guns varies with the height of the guns, there being a loss of pressure when the reciprocator slide moves the guns upward and a gain in pressure when it moves the guns downward. This occurs because of the change in height of a vertical column of the spray fluid. For example, if the stationary source of spray fluid is at floor level, the fluid must travel upward to reach the guns; and it must move upward a greater distance when the guns are at the top of their stroke than when the guns are at the bottom of their stroke. This greater upward travel of the fluid results in a greater weight of fluid pressing downward in opposition to the pressure from the stationary source of the fluid.<sup>3</sup> Without more, a loss in pressure would cause less fluid (e.g. paint) to be applied to the workpiece when the guns are in their highest position and more to be applied to the workpiece when the guns are in their lowest position, with variations in between.

The problem of pressure variation with the changing vertical movement is solved by adjustable, fluid pressure regulators 37 ("control valves"), which are mounted on the reciprocator slide 15 and move up and down with the spray guns. There is one regulator for each gun. The fluid pressure to be delivered to the guns is determined by adjustment of the pressure regulators, also known as "primary regulators." Because these pressure regulators and the guns move up and down together, the fluid pressure between the regulators and the guns does not vary during vertical reciprocation. Although the fluid pressure from the stationary source to the *input* side of the regulators 37 varies during vertical reciprocation, the regulators compensate for such variation, providing a

3. The district court found that vertical movement of the spray guns through a one-foot distance would cause a one-half pound per square inch variation in output pressure.

steady pressure at the *output* side for delivery of the fluid to the spray guns.

A standard fluid pressure regulator is adjusted by a manually-controlled knob, thumb screw, or similar device. However, when the apparatus is in operation, such adjustment "on-the-fly" (i.e., without stopping the reciprocating spraying apparatus) is difficult.<sup>4</sup> To meet this problem, the Norris '276 patent replaces the manual control of the primary regulator with a stationary, remote, secondary *air* pressure regulator (202a). This regulates the pressure of air that flows to the primary regulator through flexible plastic tube 192. By adjusting the air pressure, the variable output of the vertically moving primary regulator is controlled, and the control is precise because the weight of the air in tube 192 remains practically constant while the tube moves up and down with the reciprocator slide.

#### *The Claims*

The involved claims 5 and 6 refer to claims 3 and 4, which were disclaimed by appellant Gyromat in earlier litigation involving the '276 patent (*Gyromat Corp. v. H.G. Fisher & Co.*, 167 U.S.P.Q. 326 (N.D. Ill. 1970)), and are reproduced in the footnote below.<sup>5</sup> Claims 5 and 6 read as follows:

5. Apparatus as set forth in claim 4 in which said adjusting means comprises a pressure actuated

4. Appellant notes that the regulators are moving up and down rather rapidly and that "they carry an electrical charge of perhaps 100,000 volts or more."

5. Claims 3 and 4 read as follows:

3. Spraying apparatus comprising a vertical support, means causing vertical reciprocation of said support, a spray head carried by said support, a control valve on said sup-

(Continued on Following Page)

diaphragm and means including a remote pressure control valve connected to control the pressure applied to said diaphragm for thereby varying the pressure supplied by said first control valve to said nozzle.

6. Apparatus as set forth in claim 5 in which said pressure control valve is connected to said first control valve by a flexible coupling having insulating characteristics and an electrostatic potential is supplied to said nozzle for charging the spray material ejected therefrom.

#### Prior Art

All but two of the essential features of the invention described above are to be found in claims 3 and 4. These features have been disclaimed by appellant, and the parties agree that they may be considered prior art; also appellant does not dispute the district court's findings that the flexible coupling in claim 6 is old in the art. As to a stationary, remote, secondary (air) pressure regulator controlling pressure in a primary regulator that "reciprocates through a vertical plane," the district court found that this was not disclosed by the prior art. With respect to this feature, the district court commented that "the combination of a self-relieving pressure regulator con-

#### Footnote Continued—

port connected to said nozzle and having means supplying spray material to said nozzle at a predetermined constant pressure, a stationary source supplying spray material at a predetermined pressure, and means supplying said spray material from said source to said control valve at a pressure determined by the pressure of said source and by the pressure head between the source and said control valve which varies according to the elevation of said reciprocating valve.

4. Spraying apparatus according to claim 3 in which said control valve includes means for adjusting the predetermined pressure at which the spray material is supplied therefrom to said nozzle.

nected to a stationary fluid regulator" is "well known." (Emphasis added.)<sup>6</sup>

#### Proceedings Below

The district court based its determination that claims 5 and 6 were invalid on its holding that the subject matter of the claims was obvious for purposes of 35 U.S.C. § 103.<sup>7</sup> As we have seen, the critical subject matter of both claims is the stationary, remote, secondary pressure regulator controlling pressure in a primary regulator that "reciprocates through a vertical plane."

In declining to follow Judge Hoffman's holding of validity of claims 5 and 6 in *Gyromat Corp. v. H.G. Fisher & Co.*, *supra*, the district court noted that two of the remotely-controlled regulators cited in *Fisher* contained no bleed holes and that "the third was clearly not suitable for a paint spraying device since the bleeding means was placed in a portion of the system that corresponded to the paint line of a spray paint device"; also that Judge Hoffman had rested his conclusion of nonobviousness "in

---

6. By "Self-relieving pressure regulator," it appears that the district court was referring to a regulator having a "bleed hole" feature to assist the downward variation of pressure upon the fluid regulator. Such a feature is present in appellant's apparatus, but, as appellant points out, it is not a critical feature of the invention and is *not claimed*.

7. 35 U.S.C. § 103 provides:

§ 103. *Conditions for patentability; non-obvious subject matter*

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

part" on the bleed device disclosed in the Norris '276 patent in stating:

The provision of a manually controlled air pressure regulator, with a continuously bled regulated output, for effecting the precise control of paint pressure in a reciprocating spray apparatus was not "obvious" within the meaning of 35 U.S.C. §103.

167 U.S.P.Q. at 341. The court below went on to point out that Champion had cited prior art references which the parties agreed disclosed bleed holes in pressure regulating systems. It then said:

Thus the issue is whether the combination of two components, a self-relieving pressure regulator and a reciprocating fluid regulator, was obvious within the meaning of § 103 of the Patent Act of 1952. Each component was well-known. Also well-known was the combination of a self-relieving pressure regulator connected to a stationary fluid regulator. Was it "obvious" to decide to connect a self-relieving pressure regulator to a [vertically] reciprocating fluid regulator?

Having analyzed the scope and content of the prior art and the difference between the prior art and the subject matter of claims 5 and 6, the district court considered the level of skill of a person of ordinary skill in the art to which said subject matter pertained as of 1962 (the time when the Norris invention was made). *Graham v. John Deere Co.*, 383 U.S. 1, 148 U.S.P.Q. 459 (1966). It found that the pertinent art was "the field of hydraulics and fluid controls," and that the testimony of Champion's expert, Russell Henke, "is persuasive that in 1962 the idea of connecting a pressure regulator to a [vertically] reciprocating fluid regulator required no more than the

ordinary skill of a mechanic reasonably knowledgeable in the field of hydraulics and fluid controls."<sup>8</sup>

Stating that the benefit of hindsight is to be discounted,<sup>9</sup> the district court concluded as follows:

While the combination of components achieve a useful result, it was the same result to be expected whenever a fluid regulator is remotely controlled by a pressure regulator. The fact that the fluid regulator is [vertically] reciprocating presented no special problem either in deciding to use a remotely controlled pressure regulator or selecting means to accomplish its connection....

... That the fluid regulator in the patent reciprocates while the secondary pressure regulator remains stationary is not, on the evidence presented, a sufficiently different change in the context in which the combination of components operates to be considered a new function or a non-obvious improvement.

In responding to Gyromat's argument that Champion failed to come up with the idea of attaching a remote pressure regulator to a vertically reciprocating fluid regulator until after its personnel had seen such an arrangement constructed by the Fischer Company,<sup>10</sup> the district court said:

There is no evidence that plaintiff's [Champion's], staff was using a traveling fluid regulator but was

8. The more precise time for determining obviousness to one of ordinary skill in the art is late December of 1961, when the Norris invention was reduced to practice.

9. *Goodyear Tire & Rubber Co. v. Ray-O-Vav Co.*, 321 U.S. 275 (1944); and others.

10. This was the Norris invention found to have been infringed by Fischer in *Gyromat Corp. v. H.G. Fischer & Co.*, *supra*.

unable to come up with a device for remotely controlling it.

Rather, the district court emphasized that Champion had rejected traveling fluid regulators for reasons unrelated to the problem of fluid adjustment.

Finally, the court, recognizing that the district court in *Fischer* "was understandably impressed with the comparison between the benefits of the '276 patent and the lack of success of Fischer personnel," stated that it had reached the opposite conclusion on the basis of "augmented evidence presented here . . . of pertinent prior art disclosing continuously bled pressure regulators and persuasive testimony concerning the obviousness of remotely controlling a fluid regulator (whether stationary or reciprocating) with a pressure regulator . . . ."

#### OPINION

##### *Presumption of Validity*

Before the district court, Champion stated that "the prior art evidence to be produced . . . was not considered by the Patent Office and the presumption [under 35 U.S.C. § 282] is thus undercut or substantially weakened." However, the district court did not mention the statutory presumption of validity of the Norris '76 patent.<sup>11</sup> In

11. Champion raises this point in its brief before this court. In addition to prior art disclosing pressure regulators with a bleed feature, which we consider irrelevant, *infra*, it cites the following:

A 1960 catalog of the Hannifin Co. and a 1956 catalog of the Norgren Co., both showing pilot controlled air pressure regulators and their use with a remote, pilot regulator.

A 1951 patent to Ransburg (No. 2,559,225) for Electrostatic Coating Method and Apparatus illustrating use of insulated hoses with electrostatic spray coating apparatus.

(Continued on Following Page)

stead, it disposed of the holding of validity of claims 5 and 6 in *Gyromat Corp. v. H.G. Fischer & Co., supra*, on which Gyromat has heavily relied. In refusing to follow *Fischer*, the district court said it was persuaded by Champion's "augmented evidence" of prior art bleed-type pressure regulators not in evidence in *Fischer*. However, the relevance of such evidence is not apparent, because the bleed feature of the secondary regulator in the Norris '276 patent is not even claimed. To the extent that Judge Hoffman in *Fischer* referred to the bleed feature of the secondary regulator, this, too, would lack relevance. Nevertheless, other evidence in *Fischer* was relevant and clearly supports Judge Hoffman's conclusion of nonobviousness. Thus, after noting that H.G. Fischer's first commercial use of such a primary regulator was in 1959, but that the remote, secondary (air) pressure regulator was not reduced to practice (by Norris) until late December of 1961, Judge Hoffman said (167 U.S.P.Q. at 341):

During the intervening period of almost three years, it was necessary to shut down the paint spray equipment in order to make an adjustment in the paint spray pressure for most installations. Moreover, Mr.

##### Footnote Continued—

A 1944 patent to Roselund (No. 2,350,708) for Pan Greasing Machine (assigned to DeVilbiss) and a 1949 instruction book on installation, operation, and maintenance of the DeVilbiss Plan Greaser. These relate to spray-greasing of pans, preliminary to use in making, using a spray gun and an air pressure control valve for the gun.

There is no showing wherein such prior art is other than cumulative to that considered by the Patent Office during prosecution of the Norris '276 patent. Along with the vertically reciprocating primary pressure regulator in claims 3 and 4 (disclaimed), such prior art does show that all the hardware was available to make the critical subject matter of claims 5 and 6, namely: the stationary, remote, secondary [air] pressure regulator controlling pressure in a primary regulator that "reciprocates through a vertical plane."

Walberg [assignor of rights in certain patent applications to H.G. Fischer & Company to whom the patents were issued] admitted that there were occasions when it was necessary to adjust the paint pressure regulator of the defendant's equipment by jabbing or poking at the handle of the reciprocating regulator with an object such as a broomstick. This experience of the defendant is wholly inconsistent with its argument that the remote control of a paint pressure regulator would have been obvious to one skilled in the art.

Although we agree with the district court that the holding in *Fischer* is not controlling in this case, *see Jamesbury Corp. v. Litton Industries, Inc.*, 586 F.2d 917, 920-21, n.9 (2d Cir. 1978),<sup>12</sup> we conclude that the statutory presumption of validity of claims 5 and 6 of the Norris '276 patent still stands. Thus, the dispositive question is whether this presumption of validity has been rebutted by Champion. *See Solder Removal Co. v. United States International Trade Commission*, 582 F.2d 628, 632, 199 U.S.P.Q. 129, 133 (CCPA 1978).

#### *Champion's Expert Testimony Insufficient*

As earlier pointed out, the district court, in determining the level of skill (in 1962) of a person of ordinary

12. Gyromat argues that the same collateral estoppel effect be accorded a decision of patent validity as a decision of patent invalidity under *Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation*, 402 U.S. 313, 169 U.S.P.Q. 513 (1971). We note that Champion was not a party to the prior action and, therefore, stands in a different posture from that of the patentee in *Blonder-Tongue*. In any event, since a decision of the United States District Court for the Northern District of Illinois is not controlling as a matter of *stare decisis*, *cf. Mercantile Nat'l Bank of Chicago v. Howment Corp.*, 524 F.2d 1031, 188 U.S.P.Q. 353 (7th Cir. 1975), cert. denied, 424 U.S. 957 (1976), and in view of our disposition of this case, we need not reach this question.

skill in the pertinent art of hydraulics and fluid controls, found the testimony of Champion's expert, Russell Henke, to be persuasive. Mr. Henke, an engineer experienced in hydraulics and fluid control systems, testified that in 1960 or 1961 there were commercially available both manual controlled fluid pressure regulators and remote operated air pressure regulators, and the concept of remote control by air pressure of a fluid pressure regulator was well known. It was his belief that those possessing skill in the art such as he possessed would have had the knowledge and know-how to connect pilot operated regulators for liquid service with a pilot regulator operating on air.<sup>13</sup> He also testified—

It's my opinion that anybody who would have that knowledge of the field similar to what I might have, would be led to using a remote pilot controlled fluid regulator to solve the problem.

It's my feeling that anyone skilled in the prior art we have been discussing would be led to the same approach of applying a remote pilot control on a fluid regulator to solve this problem.

Although, as a general rule, the weight of an expert testimony is to be determined by the trial court, such a

13. Such a statement, of course, is not responsive to the question of whether persons possessing such skill would have had the knowledge and know-how to connect vertically reciprocating pilot operated regulators with a remote pilot regulator. Although the mechanics of connecting the two regulators is not part of the claimed subject matter of the Norris invention, the concept of making such a connection is part of the teaching in the Norris specification of how to practice the invention. Given such teaching, the connecting could be expected to be carried out by the ordinary mechanic. As related *infra*, Gyromat persons of ordinary skill in the pertinent art were not able to solve the problem of "on-the-fly" adjustment of vertically reciprocating fluid pressure regulators.

determination may, nevertheless, be shown to have been erroneous. *Universal Athletic Sales Co. v. American Gym Recreational & Athletic Equipment Corp.*, 546 F.2d 530, 537, 192 U.S.P.Q. 193 (3d Cir. 1976), cert. denied, 430 U.S. 984 (1977). We note other factors which detract from the weight of Henke's testimony. He had experience with paint spraying devices, with which the "on-the-fly" adjustment problem was associated and to which problem the Norris '276 patent was addressed. Moreover, his testimony was often vague. The witness did not define "the problem"; nor did he indicate what (other than the hindsight obtained from the Norris invention) would have led "a person having ordinary skill in the art" of hydraulics and fluid control systems to the "on-the-fly" solution achieved by Norris with respect to a vertically reciprocating fluid pressure regulator. On cross-examination, Mr. Henke was asked whether he had occasion to work with equipment in which there was a vertical movement between a controlled regulator and a controlling regulator. His response was as follows:

A. I suspect there must be instances where the motion was vertical as opposed to horizontal or rotary.

Q. What type of thing are you thinking about when you say that?

A. Well, mostly machine motion—I don't have specific examples in mind, but I have worked in general field of machines that are fluid operated or have fluid systems on them and there are motions in these machines, and they could be anything. It could be automation systems, it could be machine tools, they could be different kinds of equipment, construction equipment, agricultural equipment, industrial equipment, in general.

Q. This would involve the use of a vertically reciprocating regulator that was—

A. In some instances, it could, yes.

Q. In some instances? Can you give us a specific example?

A. Not off the top of my head, I can't, no.

Thus, although he had testified that the concept of remote control by air pressure of a fluid pressure regulator was well known in 1960 or 1961, he could not, on November 16, 1976 (date of testimony), think of a single example of his having worked with a *vertically reciprocating* fluid pressure regulator. As we have seen, however, the "on-the-fly" problem Norris solved arose only from prior art vertically reciprocating fluid pressure regulators.<sup>14</sup> Thus, we conclude that the testimony of Mr. Henke was clearly insufficient to support the district court's finding that in 1962 the idea or concept of connecting a pressure regulator to a (vertically) reciprocating fluid regulator required no more than the ordinary skill of a mechanic reasonably knowledgeable in the field of hydraulics and fluid controls.

#### *District Court's Finding Clearly Erroneous*

Bearing crucially on a determination of the level of skill of a person of ordinary skill in the art (hydraulics and fluid controls) is the district court's finding, quoted earlier, that there is no evidence that Champion's staff was using a traveling fluid regulator but was unable to come up with a device for remotely controlling it. This

14. Also brought out on Henke's cross-examination was the admission that the prior art, about which he had testified to show the level of skill of a person of ordinary skill in the art in 1960 or 1961, did not disclose vertically reciprocating primary regulators relative to a remote control regulator. As related earlier, the district court found this to be a fact.

was in response to Gyromat's argument, pursued on appeal, that persons of ordinary skill in the art (namely, the research staff of DeVilbiss Company, a division of Champion) were not able to solve the problem of "on-the-fly" adjustment of vertically reciprocating fluid pressure regulators. The following evidence supports Gyromat's argument and contradicts the district court's finding:

1. Deposition testimony of William D. Gauthier, Director of Research and Engineering of DeVilbiss. He had been employed by DeVilbiss since January of 1963, first as Assistant Director of Research, and had been involved in, among other things, work on paint pumps, reciprocators, and gun mounts, with work on a short-stroke reciprocator starting in early 1963.
- Q. In the course of developing a control system for the reciprocating equipment that was being developed by your group, were various arrangements considered and evaluated for effecting control of paint pressure at the gun—at the spray gun from a remote location, or from any location, for that matter?
- A. My recollection is rather hazy in that area. I believe I recall cases where fluid regulators were mounted on the reciprocator, and some mechanical linkage was evolved to provide the adjustment.
- Q. Do you remember what it looks like or what it looked like, rather?
- A. My recollection was just some insulating rods . . . with universal joints at either end connected from the reciprocator to a remote location.

Q. Was equipment ever built and delivered commercially using such an arrangement for control of paint pressure?

A. No.

2. Deposition testimony of Robert J. Della Flora, a Senior Project Engineer in the Research Group of DeVilbiss. He had been employed by DeVilbiss since April of 1960, first as a Project Engineer, and had been involved in, among other things, paint pumps and some work on control systems for reciprocators and associated equipment and some work on guns.
- Q. Did your work on the reciprocator commence at around the time that Mr. Gauthier came with the company?
- A. Yes.
- Q. What does this report, or what does this document marked as Defendant's Exhibit 20 represent, Mr. Della Flora?<sup>15</sup>

---

15. Exhibit 20 is a report by R.J. Della Flora, dated 10/23/63, entitled "Paint Feed Control." The "Objective" is stated to be "Develop simplified fluid feed control for air spray guns." Under "Conclusions" it is stated: "A simple satisfactory fluid feed control system consists of the following: . . . 5. Fluid pressure controlled by precision air pressure regulator on pressure pot." Under "Discussion" it is stated: "2. Remote adjustment of the system fluid flow control may be accomplished by using a pump, pressure pot, fluid regulator or needle valve. A pressure pot with a precision air regulator will give accurate flow control if used with accurate flow resistances and is probably the least expensive of these systems. . . . 5. Individual fluid flow control of the guns may be accomplished by using a fixed orifice, micro-adjusting needle valve, fluid regulator, individual pressure pot or individual pump. The pressure pot and pump probably should be eliminated due to cost. . . . With the gun needle valve made small and with a micro-adjusting screw for accurate control of the flow restriction, the needle valve is practical."

A. A report on possible methods of controlling paint flow. . . .

Q. To whom did you hand the report in, do you recall?

• • •

A. I believe it went to Mr. Gauthier.

• • •

Q. Did this work that is reflected in document Defendant's Exhibit 20, relate to the very first prototype reciprocator that you worked on?

• • •

A. It was a separate item. It didn't refer to the reciprocator.

Q. Oh, this was not work with respect to a reciprocator?

A. No.

Q. I take it then that it was limited to known reciprocating equipment?

A. It was paint feed control, period. Reciprocated or stationary, no difference.

Q. In other words, it was without regard to whether it was reciprocated or not?

A. Right.

• • •

Q. Did the investigations that are reflected in Defendant's Exhibit 20 result in any changes in the design of the AGC [paint system using an air atomizing concept] gun, or the paint control for the AGC gun?

A. I think it all developed concurrently.

• • •

Q. Thank you. Was this paint feed control incorporated in the AGC equipment?

A. No.

• • •

Q. You discussed . . . the ultimate paint control system that was finally adopted in the AGC system, and I believe you also testified that you did not have anything directly to do with the development of that ultimate system. Do you have any personal knowledge as to where the concept or the genesis of that remote control fluid regulator came from?

A. All of this was a group effort. The fluid regulator portion was a regulator that we had in our line. The remote air control of this regulator was developed to satisfy a request by the Research Director, Mr. Juvinal to make this unit remotely adjustable without having to turn off the electrical power or stop the reciprocator.

• • •

Q. Did Mr. Juvinal's request then immediately result in the ultimate system being developed, or did this take some period of time?

A. Today it seems as though it was a step right onto it, but I can't recall how long it did take.

Q. Were any other systems attempted or tried and discarded following this request by Mr. Juvinal and prior to the development of the ultimate system? In other words, were there any false steps along the way, or did the group just go out and put this thing together?

A. I know there were some false starts made, but I can't recall how many or how long they took.

From the foregoing testimony of Mr. Gauthier and Mr. Della Flora, it is clear that the research group at DeVilbiss, commencing early in 1963, was working on development of vertically reciprocating equipment with fluid regulators mounted on the reciprocator and on development of a paint feed control system for that equipment; that development of the paint feed control system, covered by Della Flora's report of 10/23/63, was carried out without recognition of the "on-the-fly" control problem, much less a solution to it, since it was without regard to any difference between reciprocating and stationary equipment; that the results of Della Flora's investigations were not incorporated into the AGC equipment or commercially developed; that it was not until Juvinall requested that the fluid regulators be adjustable "on-the-fly" that development of remote air control of those regulators was undertaken; and that, even then, "there were some false starts."

Providing still greater support to Gyromat's argument regarding the level of skill of a person of ordinary skill in the pertinent art is a report dated 8/31/64<sup>16</sup> by Erhard Kock, Director of Research and Engineering for DeVilbiss, who, like Gauthier, had been employed by DeVilbiss since January of 1963, first as a senior research engineer, and had been continuously involved in development of paint spray equipment. The report states that the objective of Project No. 39 ("Paint Feed Control") was to develop a suitable means for controlling, with precision and reliability, the paint flow rate for the new DeVilbiss electrostatic system, which consisted of an array of vertically reciprocating spray guns; that it was desirable for the paint flow to be readily adjustable while the system was

16. The report shows that it was approved by Gauthier on 5/20/65.

in operation, i.e., while the guns were at high voltage and reciprocating; further:

In the early consideration<sup>17</sup> of this problem, fluid regulators had been rejected because of their bulk, cost and incompatability with quick color change. Further, the use of fluid regulators did not seem to offer an easy solution to the requirement of remote on-the-fly adjustment, because in order to minimize fluid flow fluctuation as the height of the vertically reciprocating gun changed, it would have been necessary to reciprocate the fluid regulators with the guns.

A second approach, consisting of controlling the flow by varying the fluid needle opening was investigated at greater length. It had the obvious advantage of simplicity and low cost, but was finally rejected because it was difficult to control individually on-the-fly....

The fluid control method that was finally selected consisted of a modification of the small "gun-mounted fluid regulator" #44167-008 (which had just become commercially available), the diaphragm pressure of which was adjusted remotely by means of an air pressure regulator. . . . The fluid regulator itself was small enough that it could be mounted on the reciprocator adjacent each gun without creating a weight problem, and it was sufficiently cheap, that one regulator could be supplied for each gun without unduly increasing the cost of the system. The only relatively expensive component was the air regulator (a Norgren regulator was found to give the best performance), one of which had to be used in conjunction with each

17. During oral argument, the parties agreed that this occurred after 1962.

fluid regulator. However, the resulting ease of remote paint feed control for both conductive and nonconductive paints while the system was in operation, facilitated by the fact that the operator could now select and maintain a given paint flow by merely adjusting the air pressure regulator . . . seemed to be well worth the additional expense.

Thus, a contemporaneous report shows that the DeVilbiss research group found the requirement for remote "on-the-fly" adjustment to not be easily satisfied when using fluid regulators because they had to be reciprocated with the guns; also, that varying the fluid needle valve opening of the gun (recommended as "practical" by Della Flora, note 16 *supra*) was not satisfactory because of the difficulty of "on-the-fly" control. The solution that was eventually selected was made after Gauthier and Kock had (in 1963) viewed an embodiment of the Norris invention constructed by the Fischer Company.<sup>18</sup>

This report, along with the above-quoted testimony of Gauthier and Della Flora, compels the conclusion that the district court's finding, that there is no evidence that Champion's staff was unable to come up with a device for remotely controlling a traveling regulator, is clearly

18. Champion argues that motivation for remote, "on-the-fly" control of reciprocating pressure regulators would have been provided by the pan greasing machine patent and instructions (note 11, *supra*), wherein remote air pressure control is taught for regulating the flow of hot grease. In addition to the fact that the pan greasing machine does not involve a vertically reciprocating fluid pressure regulator, the argument suffers from the fact that the research group at DeVilbiss, which presumably was familiar with the pan greasing machine since the patent had been assigned to DeVilbiss, was unable to come up with a satisfactory solution to the "on-the-fly" control problem for a year and a half, and that solution was an embodiment of the Norris invention.

erroneous.<sup>19</sup> Indeed, the evidence is compellingly to the contrary. Although early in 1963 the DeVilbiss research group commenced work on a paint feed control system for vertically reciprocating equipment, it was not until a year and a half later that Kock reported a satisfactory solution to the "on-the-fly" control problem, and that solution, which is clearly an embodiment of the Norris invention, was not approved until some nine months later. Accordingly, Champion's argument that the level of skill of a person of ordinary skill in the pertinent art in late December 1961 was such that the Norris invention would have been obvious must fail.

#### *Combination of Old Elements Not Obvious Per Se*

Citing *Sakraida v. Ag Pro, Inc.*, 425 U.S. 273 (1976), Champion argues that claims 5 and 6 of the Norris '276 patent simply define "an arrangement of old elements," each performing "the same function it had been known to perform," and that such combinations are not patentable. In the factual setting of the *Sakraida* case, we have no difficulty with the holding that the invention there involved was not patentable. However, we do not agree with what amounts to an oblique suggestion that the dicta

---

#### 19. The district court also said:

It is true that the Fischer personnel, who were using a traveling [vertically reciprocating] fluid regulator, did not solve the problem. However, their failure, for a somewhat brief time, is insufficient to detract from the weight of the plaintiff's credible testimony that use of a remote-controlled pressure regulator to control the traveling fluid regulator required more than the ordinary skill of a mechanic.

Under the circumstances of this case, we do not regard a period of nearly three years as "somewhat brief" when evaluating the level of skill of a person of ordinary skill in the pertinent art, as distinguished from evaluating the factor of "long felt need." See *Graham v. John Deere Co.*, 383 U.S. 1, 17, 148 USPQ 459, 467 (1966).

in the Supreme Court's opinion overruled the statutory test of nonobviousness established by 35 U.S.C. § 103 along with the analytical guidelines for that test established by the Court in *Graham v. John Deere Co.*, *supra*, which the opinion in *Sakraida* cites with approval. *See Republic Industries, Inc. v. Schlage Lock Co.*, 592 F.2d 963, 970, 200 U.S.P.Q. 769, 777 (7th Cir. 1979). Most, if not all, inventions involve a combination of old or known elements. *Shaw v. E.B. & A.C. Whiting Co.*, 417 F.2d 1097, 1102, 163 U.S.P.Q. 580, 584 (2d Cir. 1969), *cert. denied*, 397 U.S. 1076 (1970); *Reiner v. I. Leon Co.*, 285 F.2d 501, 503, 128 U.S.P.Q. 25, 27 (2d Cir. 1960), *cert. denied*, 366 U.S. 929 (1961); *B.G. Corp. v. Walter Kidde & Co.*, 79 F.2d 20, 22, 26 U.S.P.Q. 288, 289-90 (2d Cir. 1935). If the inventions are new, useful, and nonobvious, they are patentable. If the level of skill of a person of ordinary skill in the pertinent art is such that the differences between the subject matters sought to be patented and the prior art would not have been obvious to that person, the test for nonobviousness is met.

In view of all the foregoing, we hold that the statutory presumption of validity of the Norris '276 patent has not been rebutted by Champion.

The judgment of the district court is reversed and the case is remanded for further proceedings consistent with this opinion.

UNITED STATES COURT OF APPEALS  
TENTH CIRCUIT

\_\_\_\_\_  
No. 77-1753  
\_\_\_\_\_

PLASTIC CONTAINER CORPORATION,  
Plaintiff-Appellant,

v.

CONTINENTAL PLASTICS OF OKLAHOMA, INC.,  
Defendant-Appellee.

Appeal from the United States District Court for the  
Western District of Oklahoma

(D. C. No. 76-1011-C)  
(Filed August 8, 1979)

Walter D. Ames, Watson, Cole, Grindle & Watson, Washington, D. C. (Thomas J. Greer, Jr., Diller, Brown, Ramik & White, Arlington, Virginia, and James A. Peabody, Oklahoma City, Oklahoma, on the brief) for Appellant.

William R. Laney, Laney, Dougherty & Hessin, Oklahoma City, Oklahoma, for Appellee.

Before BARRETT and LOGAN, Circuit Judges, and MILLER,\* Judge.

\_\_\_\_\_  
MILLER, Judge.

Plastic Container Corporation ("Plastic") appeals from an adverse judgment in its patent infringement suit against

\*The Honorable Jack R. Miller, Judge of the United States Court of Customs and Patent Appeals, sitting by designation.

Continental Plastics of Oklahoma, Inc. ("Continental"). In an order of August 5, 1977, without opinion, the district court denied Plastic's cross-motion for summary judgment, dismissed its complaint, entered judgment in favor of Continental, and awarded Continental costs and attorney fees. We reverse and remand.

*The Subject Matter of the Patent in Issue*

The infringement suit involves Reissue Patent No. 28,861 to Samuel Hall, Jr. ("Hall Reissue").<sup>1</sup> The Hall Reissue, obtained pursuant to 35 U.S.C. § 251,<sup>2</sup> is based on Patent No. 3,473,681<sup>3</sup> ("Hall Patent"), which was held invalid in the prior litigation of *Plastic Container Corp. v. Continental Plastics of Oklahoma, Inc.*, Civil Action No. 72-825 (W.D. Okla. December 13, 1973), affirmed in an unpublished opinion of this court, No. 74-1123, October 30, 1974. The subject matter of the Hall Reissue is a container or vial employing a safety plug and a cover which snaps on and off the container. Such containers

1. The application for reissue, entitled "Safety Medicine Bottle Closure," was filed on May 23, 1975, and issued on June 15, 1976. During prosecution of the Hall Reissue, no changes were made in the specification. However, claims 1-4 and 6-7 were cancelled; claim 5 was amended; and new claim 8 was added.

2. 35 U.S.C. § 251 reads in pertinent part:

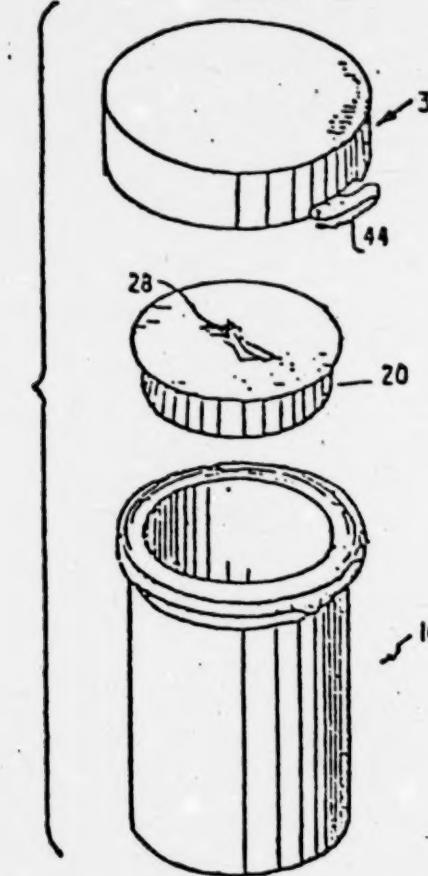
§ 251. Reissue of defective patents

Whenever any patent is, through error without any deceptive intention, deemed wholly or partly inoperative or invalid, by reason of a defective specification or drawing, or by reason of the patentee claiming more or less than he had a right to claim in the patent, the Commissioner shall, on the surrender of such patent and the payment of the fee required by law, reissue the patent for the invention disclosed in the original patent, and in accordance with a new and amended application, for the unexpired part of the term of the original patent. No new matter shall be introduced into the application for reissue.

3. This patent issued October 21, 1969, on an application filed November 21, 1968.

are used by pharmacists in dispensing medicaments, such as capsules or tablets, as a precaution against access by young children. Figure 1 of the Hall Reissue is illustrative of an embodiment of the claimed invention:

FIG. 1



In order to remove the safety plug (internal closure 20), the external closure cap 36 (snap cover) is snapped off container 10 using abutment key 44, which depends from the side of the external closure cap. With the cap removed, the abutment key is used to remove the safety plug by inserting it into recess 28 of the safety plug and pulling the plug out. Although such manipulations are relatively simple for an adult, they are too complex for most young children. Because the abutment key serves the dual function of a key and a thumb tab, the same external closure cap may be used when there is no safety plug, thus providing the pharmacist with an option to omit the safety plug for a "non-childproof" container.

Claims 5 and 8, the only two claims that remain in the Hall Reissue, are illustrative:<sup>4</sup>

5. The safety container closure of claim 1<sup>5</sup> wherein said external closure cap is provided with a peripheral skirt, the lowermost part of said skirt carrying said key, the interior of said skirt carrying an annular bead which snaps over a complementary bead around an outer periphery of the container opening, whereby

4. The portions of the claims in italics were added to the Hall Patent during prosecution of the Hall Reissue.

5. Claim 1 (which was cancelled as an independent claim during the reissue prosecution but, nevertheless, remains incorporated into claim 5) reads:

1. A safety container closure assembly including,
  - (a) a container having an opening,
  - (b) an internal closure positioned within said opening, said closure having a key recess therein,
  - (c) an external cap positioned over said opening,
  - (d) said external cap carrying a key at a location not coincident with the location of said key recess,
  - (e) whereby said cap must be removed to insert the key into the key recess and thereby remove the internal closure.

*the key carried by the external cap functions as a tab against which the thumb is pressed in a generally upward direction to remove the external cap from the container and functions additionally as a key for cooperation with the key recess of the internal closure to thereby permit the internal closure to be removed from its position within the opening of the container.*

8. A safety container closure assembly including,
  - (a) a container having an opening,
  - (b) an internal closure in the form of a plug positioned within said opening, said closure having a key recess therein,
  - (c) an outer closure in the form of an external cap positioned over said opening,
  - (d) said external cap having a skirt integral therewith and depending from the top of said cap, the interior of said skirt carrying an annular bead which snaps over a complementary bead on the outer periphery of container opening,
  - (e) a combination thumb abutment-key integral with and extending substantially horizontally outwardly from said skirt at the lower portion of the skirt, said thumb abutment-key functioning as a tab against which the thumb is pressed in a generally upwardly direction to remove the said external cap from the container and functioning additionally as a key for cooperation with the said key recess of said internal closure to thereby permit said inclosure to be removed from its position within the opening of said container.

### Background

An understanding of the previous litigation involving the Hall Patent is necessary for consideration of the issues presented by this appeal involving the Hall Reissue. In its December 13, 1973, unpublished opinion, the district court stated the following conclusions of law: (1) Claims 1-4 and 7 are invalid under 35 U.S.C. § 102 because they "define structures which are devoid of novelty in that they are clearly anticipated by the prior art." (2) Claims 1-5 and 7 are invalid under 35 U.S.C. § 103 "as being directed to structures which lack invention and were 'obvious'."<sup>6</sup> (3) Claims 1-7<sup>7</sup> are invalid under (the second paragraph of) 35 U.S.C. § 112<sup>8</sup> because they

6. We note that, since the 1952 codification of the patent laws, patentability depends on nonobviousness under 35 U.S.C. § 103 rather than on "invention." An invention that is obvious is an unpatentable invention. *Graham v. John Deere Co. of Kansas City*, 383 U.S. 1, 14-15, 148 U.S.P.Q. 459, 465 (1966); *In re Bergy*, 596 F.2d 952, 959, 201 U.S.P.Q. 352, 361-62 (C.C.P.A. 1979); Rich, *Laying the Ghost of the "Invention" Requirement*, 1 Am. Pat. L. A. Q. 26, 40 (1972). 35 U.S.C. § 103 reads:

§ 103. Conditions for patentability; non-obvious subject matter

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Although there are seven claims in the invalidated Hall Patent, Plastic sued for infringement on only claims 1-5 and 7. Nevertheless, some of the district court's conclusions of law apply to claim 6, because Continental, by way of counterclaim, filed a declaratory judgment action asking that all of the Hall Patent claims be held invalid.

8. 35 U.S.C. § 112 provides in pertinent part:

§ 112. Specification

The specification shall contain a written description of the invention, and of the manner and process of making

(Continued on Following Page)

"fail to particularly point out and distinctly claim the subject matter which the applicant regarded as his invention." The court somewhat amorphously stated that the invention is not distinctly claimed if "the dictionary meanings of the term 'coincident' are not used in construing the claims," because the specification fails "to explain or set forth the meaning of that term." (4) Claims 1-7 are invalid for being "in contravention of the provisions of Rule 75(d)(1)," 37 C.F.R. § 1.75(d)(1),<sup>9</sup> because all claims contain terms ("at a location not coincident with the location of the key recess," "coincident," and "recess") which do not find clear support or antecedent basis in the description set forth in the specification. (5) Claims 1-7 are invalid under 35 U.S.C. § 112, first paragraph, for failure to set forth the best mode of carrying out the invention ("to provide ribs on the skirt portion of the stopper or internal closure") as contemplated by the inventor at the time of filing his application.

### Footnote Continued—

and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same, and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

9. 37 C.F.R. § 1.75(d)(1) reads:

The claim or claims must conform to the invention as set forth in the remainder of the specification and the terms and phrases used in the claims must find clear support or antecedent basis in the description so that the meaning of the terms in the claims may be ascertainable by reference to the description. (See § 1.58(a).)

Because Rule 75(d)(1) merely implements the description requirement of the first paragraph of 35 U.S.C. § 112 (*supra* note 8), we consider § 112 to be the statutory basis for this conclusion of law.

On appeal, this court stated in an unpublished opinion (No. 74-1123, Oct. 30, 1974, at 7):

We hold that the Trial Court did not err in finding that the entire patent was anticipated by the prior art. We have considered Plastic's contention raised in its reply brief that the "prior art fails to show an element that functions both as a key which enters a key recess and as a thumb abutment." We agree. However, such an element, i.e., an abutment functioning as a key and a thumb tab, was never claimed. [Emphasis added.]

The court discussed further testimony at trial and said (*supra* at 9):

Applying the prior art of Velt and Mostoller, and the differences between the prior art and Claim 5, considered together with the ordinary skill in the pertinent art, we hold that the Trial Court did not err in finding '681 [Hall Patent No. 3,473,681] invalid as obvious.

We have carefully considered the remaining allegations of error advanced by Plastic.<sup>10</sup> They are without merit.

Thus, it is clear that this court affirmed the district court in its conclusion that all claims were invalid under 35 U.S.C. § 103. The court particularly pointed out that the claims failed to recite the limitation on which Plastic relied as evidence of nonobviousness. Moreover, the statement in section III of the opinion indicates that this court intended to reject all of Plastic's allegations of error and

10. These allegations of error were directed at all of the district court's conclusions of law.

to affirm each of the other bases for the district court's holding that the claims were invalid.<sup>11</sup>

Acting on the above-quoted statement in this court's previous opinion, that "an abutment functioning as a key and a thumb tab, was never obtained" in the Hall Patent, Plastic returned to the Patent and Trademark Office ("PTO") and filed an application for reissue. Following issuance of the Hall Reissue, Plastic filed this action for patent infringement against Continental.

#### *District Court Proceedings*

In the district court,<sup>12</sup> Continental moved for summary judgment and requested an award of costs and attorney fees, arguing: (1) that as a result of the prior litigation between the same parties, Plastic "is barred from relief as a result of the application of one or more of the doctrines of res judicata, collateral estoppel, estoppel by record and/or law of the case"; (2) that the claims of the Hall Reissue are invalid because Plastic did not discharge "the heavy duty of complete good faith, and full and open disclosure of all pertinent and material facts to the Patent Examiner during the prosecution of the reissue application"; and (3) even assuming, *arguendo*, that the Hall

11. As discussed *infra*, the disposition of these other bases of invalidity in the prior appeal is important to this appeal because collateral estoppel is one of the major issues. If this court, in its previous decision, had merely affirmed on the basis of obviousness (35 U.S.C. § 103) and had not disposed of the other bases of invalidity, there could be collateral estoppel only on the obviousness issue in any subsequent litigation. See *Martin v. Henley*, 452 F.2d 295, 300 (9th Cir. 1971); *International Refugee Organization v. Republic S.S. Corp.*, 189 F.2d 858, 862 (4th Cir. 1951). See generally Restatement of Judgments § 63 comment n, § 69 comment b (1942); 1B Moore's Federal Practice ¶ 0.416[2] at 2232 n. 10 (1974), and cases cited therein; *id.* at ¶ 0.443[5] at 3920-22.

12. The Honorable Stephen Chandler, before whom the first trial was conducted.

Reissue is infringed, Continental "is vested with certain statutorily recognized intervening rights [pursuant to 35 U.S.C. § 252<sup>13</sup>] which immunize" Continental. Plastic cross-moved for summary judgment: (1) on infringement because Continental had admitted that its device is readable upon both claims 5 and 8 of the Hall Reissue; and (2) on validity because reissue claims 5 and 8 are "now purged of the defect" noted in the previous Tenth Circuit opinion.

As related earlier, the district court denied Plastic's motion for summary judgment, dismissed its complaint, granted Continental's motion for summary judgment, and awarded Continental costs and attorney fees.

#### OPINION

Because the district court did not indicate which of Continental's arguments it found persuasive,<sup>14</sup> this court

13. 35 U.S.C. § 252 reads in pertinent part:

No reissued patent shall abridge or affect the right of any person or his successor in business who made, purchased or used prior to the grant of a reissue any thing patented by the reissued patent, to continue the use of, or to sell to others to be used or sold, the specific thing so made, purchased or used, unless the making, using or selling of such thing infringes a valid claim of the reissued patent which was in the original patent. The court before which such matter is in question may provide for the continued manufacture, use or sale of the thing made, purchased or used as specified, or for the manufacture, use or sale of which substantial preparation was made before the grant of the reissue, and it may also provide for the continued practice of any process patented by the reissue, practiced, or for the practice of which substantial preparation was made, prior to the grant of the reissue, to the extent and under such terms as the court deems equitable for the protection of investments made or business commenced before the grant of the reissue.

14. Although Plastic appears to criticize the district court for failing to specify the basis of its decision, we note that such failure is not error in view of Fed. R. Civ. P. 52(a), which states that "[f]indings of fact and conclusions of law are unnecessary on decisions of motions under Rules 12 and 56," and in view of the fact

(Continued on Following Page)

must consider each argument and, in order for the lower court's decision to be reversed, Plastic must prevail on each issue.

#### (1) Collateral Estoppel Issue<sup>15</sup>

Continental argues that Plastic should be collaterally estopped from asserting Hall Reissue claims 5 and 8 because "these claims substantively define the same invention as did the claims involved in the first suit." It notes that "the written specifications and the drawings of both the original and reissue patents are identical" and suggests that the two claims issued in the Hall Reissue are identical to the claims of the Hall Patent "except for slight differences of wording." Further, Continental asserts that the basis for the Supreme Court's decision in *Blonder-Tongue Laboratories, Inc. v. University of Illinois Foundation*, 402 U.S. 313, 169 U.S.P.Q. 513 (1971), was "the policy that the patentee should only be allowed one opportunity to litigate any given issue, unless he can show that his first opportunity was unfair procedurally, substantively or evidentially"; and that the courts have applied this policy in allowing collateral estoppel as a defense to an infringement suit based on claims which, themselves, were not previously adjudicated invalid.

#### Footnote Continued—

that Fed. R. Civ. P. 56 concerns motions for summary judgment. Nevertheless, in a case such as this which involves numerous complex legal issues, had the lower court stated its conclusions of law, no matter how briefly, time in the consideration of this appeal would have been saved; moreover, we would have the benefit of the lower court's views.

15. The courts have not been consistent in the meanings assigned to the terms "res judicata" and "collateral estoppel," as well as "estoppel by record" and "law of the case," particularly when applied to patent litigation. We choose the term "collateral estoppel" as the one most appropriate under the facts of this case.

Indeed, the Court in *Blonder-Tongue*, *supra* at 332-33, 169 U.S.P.Q. at 521, did speak in terms of "issues" and "questions," saying:

Moreover, we do not suggest, without legislative guidance, that a plea of estoppel by an infringement or royalty suit defendant must automatically be accepted once the defendant in support of his plea identifies the issue in suit as the identical question finally decided against the patentee or one of his privies in previous litigation. Rather, the patentee-plaintiff must be permitted to demonstrate, if he can, that he did not have "a fair opportunity procedurally, substantively and evidentially to pursue his claim the first time." [Emphasis added; footnote omitted.]

Also, it is true that, because collateral estoppel is grounded on public policy, particularly as it relates to judicial economy, some courts have not limited its application to adjudicated claims only. See, e.g., *Westwood Chemical, Inc. v. Molded Fiber Glass Body Co.*, 498 F.2d 1115, 182 U.S.P.Q. 517 (6th Cir. 1974). The essential element of collateral estoppel is substantial identity of the issue or issues in each action. *Partmar Corp. v. Paramount Pictures Theatres Corp.*, 347 U.S. 89 (1954); *Carter-Wallace, Inc. v. United States*, 496 F.2d 535, 182 U.S.P.Q. 172 (Ct. Cl. 1974). Thus, the public interest in upholding valid patents, including reissued patents, outweighs the public interest underlying collateral estoppel where the issue or issues in each action are not substantially identical. *In re Russell*, 58 C.C.P.A. 1081, 439 F.2d 1228, 169 U.S.P.Q. 426 (1971); *In re Craig*, 56 C.C.P.A. 1438, 411 F.2d 1333, 162 U.S.P.Q. 157 (1969).

Accordingly, we agree with Continental that collateral estoppel may apply, under certain circumstances, to pre-

viously unadjudicated claims. However, it seeks to apply this defense too broadly here.<sup>16</sup> It is basic patent law doctrine that claims of a patent define the invention and the "metes and bounds" of the grant. See *Brenner v. Manson*, 383 U.S. 519, 534, 148 U.S.P.Q. 689, 695 (1966); *Deyerle v. Wright Manufacturing Co.*, 496 F.2d 45, 49, 181 U.S.P.Q. 685, 688 (6th Cir. 1974); *Citizens Trust Co. v. Lear Jet Corp.*, 403 F.2d 956, 958, 160 U.S.P.Q. 11, 13 (10th Cir. 1968), cert. denied, 394 U.S. 950, 161 U.S.P.Q. 832 (1969). Accordingly, any determination of whether collateral estoppel applies must be directed to the claimed invention, i.e., the invention defined by the claims, rather than to a broader invention that may be disclosed in the application. As the Sixth Circuit said in *Westwood Chemical, Inc. v. Molded Fiber Glass Body Co.*, *supra* at 1117, 182 U.S.P.Q. at 518:

[C]ollateral estoppel is available as a defense when unadjudicated claims present questions of fact identical to the questions presented in the adjudicated claims; when each unadjudicated claim merely restates, without significant difference, an adjudicated claim; and when none of the unadjudicated claims defines an invention separate and apart from the invention defined in the adjudicated claims. [Emphasis added.]

Accord, *Westwood Chemical, Inc. v. United States*, 525 F.2d 1367, 187 U.S.P.Q. 656 (Ct. Cl. 1975); *In re Clark*, 522 F.2d 623, 628, 187 U.S.P.Q. 209, 213 (C.C.P.A. 1975)

16. Continental argues that "a suit on a reissue patent is barred by a prior judgment between [sic] the same parties holding the original patent, upon which the reissue is based, to be invalid, if the reissue patent is for the same invention as the original patent." However, this argument is in conflict with the reissue statute (35 U.S.C. § 251), which provides that the PTO shall, upon compliance with other provisions, "reissue the patent for the invention disclosed in the original patent" when "any patent is . . . deemed wholly or partly . . . invalid."

(Miller, J., concurring); *Bourns, Inc. v. United States*, 187 U.S.P.Q. 174 (Ct. Cl. Trial Div. 1975), opinion adopted per curiam, 537 F.2d 486, 199 U.S.P.Q. 256 (Ct. Cl. 1976); see *Technograph Printed Circuits, Ltd. v. Methode Electronics*, 484 F.2d 905, 908-09, 179 U.S.P.Q. 206, 208-09 (7th Cir. 1973). Moreover, unlike the above-cited precedents, this appeal involves a reissue patent which the PTO has reexamined and issued, presumably after consideration of the prior art on which the original patent was held invalid.<sup>17</sup> Thus, to the reissued claims, a presumption of validity has attached. 35 U.S.C. § 282. Recognizing that this court's review must take into account the differences between the claimed inventions of the Hall Reissue and the Hall Patent, we now consider the holdings of invalidity in the prior litigation.<sup>18</sup>

#### A. Obviousness under 35 U.S.C. § 103

The Court of Claims in *Westwood Chemical, Inc. v. United States*, *supra* at 1375,<sup>19</sup> indicated how, when faced with a prior holding of invalidity for obviousness, a court should determine whether the unadjudicated claims are substantially identical to the adjudicated claims:

In approaching that question, it should be noted that, while it is convenient to refer to the "issue of patent validity," that can be misleading. Where obviousness is

17. However, as discussed *infra*, Continental argues that there was no consideration by the PTO of the prior decision of invalidity by the district court.

18. We need not consider the holding of invalidity of Hall Patent claims 1-4 and 7 under 35 U.S.C. § 102, because those claims were cancelled in the prosecution of the Hall Reissue; and claim 5, which was narrowed in the reissue prosecution, was not held invalid under that section.

19. Trial Judge Cooper's opinion, 186 U.S.P.Q. 383, 389 (1975), was adopted per curiam.

the basis for the prior invalidity holding, an inquiry into the identity of the validity issue is more properly phrased in terms of the factual inquiries mandated by *Graham v. John Deere Co.*, 383 U.S. 1, 17, 86 S.Ct. 684, 15 L.Ed.2d 545 [148 U.S.P.Q. 459, 466-467] (1966), as a prerequisite to such a validity determination. Thus, the inquiry should be whether the nonlitigated claims present new issues as to the art pertinent to the non-litigated claims; as to the scope and content of that art; as to the differences between the prior art and the nonlitigated claims; and as to the level of ordinary skill in that art. If none of these inquiries raises any new triable issues, then the obviousness determination in the prior proceeding should be equally applicable to the nonlitigated claims.

. . . If they are of identical scope, it readily follows that no new issues bearing on the obviousness determination are presented. On the other hand, such a comparison may reveal some differences of a substantive nature. In that event, it will be necessary to go a step further and determine whether those differences are of a kind that would have been itemized in a *Graham* analysis as a difference between the claim and the prior art, or whether it was known in the prior art and is only a part of the claimed combination as a whole that provides the context in which the obviousness determination is made. If it is only of the latter character, i. e., it is known in the prior art and does not alter the issue as to the differences between the claimed subject matter and the prior art, it is still necessary to assess the importance of the difference to the combination as a whole since it is from that standpoint that the obviousness determination must be made. [Citations omitted.]

The following limitation in Hall Reissue claim 5 is not found in Hall Patent claim 5:

*whereby the key carried by the external cap functions as a tab against which the thumb is pressed in a generally upward direction to remove the external cap from the container and functions additionally as a key for cooperation with the key recess of the internal closure to thereby permit the internal closure to be removed from its position within the opening of the container.*

Claim 8, which was added as a new, independent claim during the reissue prosecution, contains comparable language directed to the dual function of the abutment as a key and a thumb tab. In the previous case, this court agreed with Plastic that such a dual function was not shown in the cited prior art, but held Plastic's claims invalid for obviousness because of Plastic's failure to claim this dual function and to thus distinguish its claims over the prior art. From the opinion, Plastic could reasonably draw a suggestion to further limit its claims by incorporating in them this dual function feature. We are persuaded that this feature in the unadjudicated Hall Reissue claims is of such significance as to require a new analysis of these claims as prescribed by *Graham v. John Deere Co.*, *supra*. Therefore, we conclude that the claimed invention of the Hall Reissue cannot be considered substantially identical to the claimed invention of the Hall patent for purpose of collateral estoppel.

#### B. Indefiniteness under 35 U.S.C. § 112, 2d paragraph

This section requires that there be claims "particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention." It is es-

sentially a requirement for "precision and definiteness of claim language." *In re Conley*, 490 F.2d 972, 180 U.S.P.Q. 454 (C.C.P.A. 1974); see *Hinde v. Hot Sulphur Springs, Colorado*, 482 F.2d 829, 837, 178 U.S.P.Q. 584, 588 (10th Cir. 1973). If the scope of the subject matter embraced by a claim is clear and if the applicant has not otherwise indicated that he intends the claim to be of a different scope, the claim satisfies this requirement. *In re Borkowski*, 57 C.C.P.A. 946, 952, 422 F.2d 904, 909, 164 U.S.P.Q. 642, 645-46 (1970). In other words, claims must make "clear the subject matter from which they would preclude others." *In re Hammack*, 57 C.C.P.A. 1225, 1230-31, 427 F.2d 1378, 1382, 166 U.S.P.Q. 204, 208 (1970).<sup>20</sup>

As related above, in the earlier district court opinion, the court concluded that the term "coincident," as used in the claims ("said external cap carrying a key at a location not coincident with the location of said key recess") is indefinite.<sup>21</sup> However, we conclude that any ambiguity or indefiniteness has been rectified in new claim 5.<sup>22</sup> With the additional claim language, it is now clear that the abutment key carried on the lowermost part of the skirt of the external closure cap is located in such a position that it can

---

20. For purposes of section 112, 2d paragraph, only the claims are examined; it is improper for a court to read the specification and *come to its own conclusion* regarding what the applicant regards as his invention. *In re Ehrreich*, 590 F.2d 902, 906-07, 200 U.S.P.Q. 504, 508 (C.C.P.A. 1979); *In re Borkowski*, *supra*.

21. The court, noting the dictionary definition of "coincident" as "the occupation of the same position in space," found a "manifest tendency toward ambiguity" in the quoted phrase because, in answer to an interrogatory, Plastic stated that this phrase means that "the recess is at the top of the container assembly, while the key is at the side of the container assembly"; whereas, at trial, Plastic's expert testified that the phrase means that the key is "axially offset from the key recess," employing the vertical axis of the container as the reference line.

22. There is no problem of indefiniteness with claim 8 since that claim does not include the term "coincident."

function "as a tab against which the thumb is pressed in a generally upward direction to remove the external cap from the container." Such a position is necessarily removed from the recess or aperture in the safety plug. Thus, the ambiguity found by the district court has been eliminated. Moreover, in light of the additional claim language, the statements of Plastic and its expert witness (*see supra* note 21) appear consistent.

*C. Lack of description under 35 U.S.C. § 112, 1st paragraph*

To satisfy the description requirement of this section of the statute, an application must contain sufficient disclosure, expressly or inherently, to make it clear to one skilled in the art that the patentee was in possession of the claimed subject matter at the time of the filing of the application. *In re Mott*, 539 F.2d 1291, 1296-97, 190 U.S.P.Q. 536, 541 (C.C.P.A. 1976); *In re Smythe*, 480 F.2d 1376, 1382, 178 U.S.P.Q. 279, 284 (C.C.P.A. 1973). For essentially the same reasons that the language added to Hall Reissue claim 5 is sufficient to rectify any ambiguity or indefiniteness, we conclude that it enables appellant's specification to meet the description requirement of 35 U.S.C. § 112, first paragraph. We merely add that the additional claim language demonstrates the correspondence of the phrase in the claims ("at a location not coincident with the location of the key recess") with statements in the specification (column 1, lines 42-57):<sup>23</sup>

The outer closure is provided with a tab or key, preferably integral therewith and which is inserted into

23. It is not necessary that the language of the claims be described in *haec verba* in the specification in order for the description requirement to be satisfied. *In re Smith*, 481 F.2d 910, 178 U.S.P.Q. 620 (C.C.P.A. 1973).

a complementary aperture in the plug. The key is slightly rotated and is then pulled, thereby dislodging the plug. . . . Specifically, the key tab is an integral part of the outer closure to thereby preclude loss of the key. Further, it not only performs the function above described, but additionally serves as an abutment against which the thumb of the user may be placed to effect dislodgment of the closure from the container.

So, too, with the summary of the subject matter of the application in the abstract:

A safety container closure for small plastic medicine bottles. A plug is inserted into the top or neck, in a tight friction-fit. The plug carries a key recess. An outer cap fits over the top of the container, and carries a key molded to it. The key is placed into the recess, and the plug engaged for withdrawal.

*D. Failure to disclose the best mode under 35 U.S.C. § 112.*

This section requires the application to "set forth the best mode contemplated by the inventor of carrying out his invention." Such a disclosure is calculated to insure that the public will receive the benefits intended in exchange for the grant to the patentee of limited economic privileges. *Union Carbide Corp. v. Borg-Warner Corp.*, 550 F.2d 355, 193 U.S.P.Q. 1 (6th Cir. 1977); *Ziegler v. Phillips Petroleum Co.*, 483 F.2d 858, 177 U.S.P.Q. 481 (5th Cir.), cert. denied, 414 U.S. 1079, 180 U.S.P.Q. 1 (1973). There is no requirement that the "best" mode disclosed in fact be the *optimum* mode of carrying out the invention. "Even if there is a better method, his [the patentee's] failure to disclose it will not invalidate his patent

if he does not know of it or if he does not appreciate that it is the best method." *Benger Laboratories, Ltd. v. R.K. Laros Co.*, 209 F. Supp. 639, 644, 135 U.S.P.Q. 11, 15 (E.D. Pa. 1962), *aff'd per curiam*, 317 F.2d 455, 137 U.S.P.Q. 693 (3d Cir.), *cert. denied*, 375 U.S. 833, 139 U.S.P.Q. 566 (1963).

In the previous litigation, the district court concluded that the best mode of carrying out the invention *claimed* in the Hall Patent was not set forth because the "inventor Hall knew, at the time of filing his patent application which ultimately matured to the patent here in suit, that it was of advantage to provide ribs on the skirt portion of the stopper or internal closure, and that this provided advantage over internal closures carrying no such ribs." Continental argues that, because "the specification and drawings in the reissue application, and in the application which culminated in the issuance of the original Hall patent, are identical, the documents contain identical deficiencies which were found fatal by the Trial Court in the initial litigation"; that, therefore, collateral estoppel based on the prior holding of invalidity due to failure to set forth the best mode is proper. The theory of Continental's argument is that, absent a change in the specification or drawings of the original patent during reissue prosecution, a holding that there was a failure to set forth the best mode cannot be overcome. However, this simply overlooks that it is the best mode of carrying out the *claimed* invention that must be set forth pursuant to section 112. *Dale Electronics, Inc. v. R.C.L. Electronics, Inc.*, 488 F.2d 382, 389, 180 U.S.P.Q. 225, 229-30 (1st Cir. 1973) (best mode requirement was satisfied by disclosure of "a specific material that will make possible the successful reproduction of the effects claimed by the patent"); *see Weil v. Fritz*, ..... F.2d ..... n.11, ..... U.S.P.Q.

....., ..... n.11, No. 79-534, slip op. at 10 n.11 (C.C.P.A. June 28, 1979); *Maxon v. Maxon Construction Co.*, 395 F.2d 330, 334-35, 158 U.S.P.Q. 77, 80 (6th Cir. 1968). The new language added to claim 5 (and incorporated in claim 8) has narrowed the scope of the claimed invention to a safety container that features an abutment on the external closure cap having the dual function of a key and a thumb tab. Whether there are ribs on the skirt of the safety plug is irrelevant to this critical feature of the Hall Reissue claimed invention. Moreover, since this feature is clearly described in appellant's specification, we conclude that the specification meets the best mode requirement of 35 U.S.C. § 112 for the Hall Reissue claimed invention,<sup>24</sup> and that this is so regardless of the fact that the same specification may have set forth the best mode for carrying out the invalidated Hall Patent claimed invention.

In view of the foregoing, we hold that Plastic is not collaterally estopped from asserting the validity of claims 5 and 8 of the Hall Reissue.

---

24. *See* the portion of the specification (column 1, lines 42-57) and the abstract quoted *supra*. *See also* column 2, line 62 to column 3, line 12:

In use, with the container 10 closed or sealed as indicated in FIG. 2, when it is desired to open and obtain access to the contents, the user grasps the container in one hand and with the thumb or other finger of the other hand pushes upwardly against the bottom surface of the key tab 44. This causes the closure to undergo displacement, with the bead 42 sliding over the bead 16. After the closure 36 has been entirely removed, it is manipulated as shown at FIG. 4 so that the key tab is opposite the opening 28. After insertion, as shown at FIG. 5, the closure cap 36 is rotated in a clockwise direction so that the outwardly flaring tips 49 assume a position underneath and slightly beyond the ends of slot 32. In this position, the closure 36 is now pulled and the plug 22 thus removed from the container. For replacement, the plug and top snap cap 38 are separated and the plug is first placed into position and then the cap snapped on, the bead 42 being pushed below the bead 16.

(2) *Issue of Fraud on the PTO*

In the district court proceeding, Continental argued that Plastic is precluded from enforcing the Hall Reissue because it failed to discharge "the heavy duty of complete good faith, and full and open disclosure of all pertinent and material facts to the Patent Examiner during the prosecution of the reissue application." During that prosecution, Plastic furnished the examiner with copies of the unpublished Tenth Circuit opinion of October 30, 1974, and of the prior art references cited during the course of the litigation. However, it did not submit a copy of the district court's findings of fact and conclusions of law (although it specifically referred to the district court case in the discussion of the prior art). Continental now argues (brief at 31) that this failure resulted in the reissue patent being fraudulently procured, saying:

In prosecuting its application for Reissue Plaintiff [Plastic] misled the Patent and Trademark Office by telling the Patent Examiner that the basis for the holding of invalidity of the original patent was merely a technicality, namely that Plaintiff had failed to claim a combination key-thumb abutment. It is clear from a reading of this Court of Appeals' opinion in the prior litigation that this Court made no such "holding", and that the statement, taken from context in the appellate opinion, and upon which Plaintiff based his case for Reissue, was merely an offhanded dicta [sic]. Plaintiff, however, in this most deceptive fashion, told the Patent and Trademark Office only that the original patent was held invalid for anticipation, and that this Court had said that such anticipation could be avoided by adding to the claims language covering a combination key-thumb abutment.

... [Plastic's "misleading presentation" to the PTO] is, however, much compounded by the additional

fact that Plaintiff did not inform the Patent and Trademark Office that the original patent had also been held invalid on the grounds of obviousness, failure to disclose the best mode and indefiniteness. [Emphasis in the original.]

It is true, of course, that fraud in the prosecution of a patent (sometimes referred to as "inequitable conduct" or "bad faith") will, if established, result in the patent being held invalid and/or unenforceable. See *Precision Instrument Manufacturing Co. v. Automotive Maintenance Machinery Co.*, 324 U.S. 806, 65 U.S.P.Q. 133 (1945); *Admiral Corp. v. Zenith Radio Corp.*, 296 F.2d 708, 716, 131 U.S.P.Q. 456, 461 (10th Cir. 1961).<sup>25</sup> For a defense founded on fraud to succeed, both materiality and intent must be established.

In determining materiality, the courts are not in agreement on the test to be applied. Three different tests have been used. The first is the *objective "but for"* test, i.e., the misrepresentation was so material that, but for the misrepresentation, the patent not only would not have been issued but should not have been issued.<sup>26</sup> The second is the *subjective "but for"* test, i.e., the misrepresentation caused the examiner to approve the application for patent when he would not otherwise have done so.<sup>27</sup> Thus, the

25. See also Dunner, Gambrell, & Adelman, 3A *Patent Law Perspectives* §§ G.1[1]-G.1[2] (1979); Miller, *Fraud on the PTO*, 58 J. Pat. Off. Soc'y 271 (1976); Kayton, Lynch, & Stern, *Fraud in Patent Procurement: Genuine and Sham Charges*, 43 Geo. Wash. L. Rev. 1 (1974).

26. *Swift Chemical Co. v. Usamex Fertilizers, Inc.*, 197 U.S.P.Q. 10, 29 (E.D. La. 1977); *Corning Glass Works v. Anchor Hocking Glass Corp.*, 253 F. Supp. 461, 469, 149 U.S.P.Q. 99, 106 (D. Del. 1966), modified, 374 F.2d 473, 153 U.S.P.Q. 1 (3d Cir.), cert. denied, 389 U.S. 826, 155 U.S.P.Q. 767 (1967).

27. *American Cyanamid Co. v. FTC*, 363 F.2d 757, 150 U.S.P.Q. 135 (6th Cir. 1966); *Waterman-Bic Pen Corp. v. W.A. Sheaffer Pen Co.*, 267 F.Supp. 849, 856, 153 U.S.P.Q. 499, 504 (D. Del. 1967).

subjective test does not permit the reviewing court to conclude that, notwithstanding the misrepresentation, the patent was properly issued.<sup>28</sup> The third test has been labeled the "but it might have been" test, i.e., the misrepresentation in the course of the patent prosecution might have influenced the examiner.<sup>29</sup>

Recently, this court in *True Temper Corp. v. CF&I Steel Corp.*, ..... F.2d ....., ..... U.S.P.Q. ...., Nos. 76-2106, 76-2107 (10th Cir. May 31, 1979) (hereinafter "True Temper") had occasion to consider the defense of fraud in the prosecution of a patent application and made the following statement regarding the element of materiality of fraud (slip op. at 19-20):<sup>30</sup>

True Temper argues that information is material . . . only if the examiner would not have issued the patent

28. As the U.S. Court of Customs and Patent Appeals said in *Norton v. Curtiss*, 57 C.C.P.A. 1384, 1405, 433 F.2d 779, 795, 167 U.S.P.Q. 532, 545 (1970):

It is our view that a proper interpretation of the "materiality" element of fraud in this context must include therein consideration of factors apart from the objective patentability of the claims at issue, particularly (where possible) the subjective considerations of the examiner and the applicant. Indications in the record that the claims at issue would not have been allowed but for the challenged misrepresentations must not be overlooked due to any certainty on the part of the reviewing tribunal that the claimed invention, viewed objectively, should have been patented. If it can be determined that the claims would not have been allowed but for the misrepresentation, then the facts were material regardless of their effect on the objective question of patentability. [Footnote omitted; emphasis in original.]

29. *Monsanto Co. v. Rohm & Haas Co.*, 456 F.2d 592, 172 U.S.P.Q. 323, cert. denied, 407 U.S. 934, 174 U.S.P.Q. 129 (1972); *Carter-Wallace Inc. v. Davis-Edwards Pharmacal Corp.*, 443 F.2d 867, 169 U.S.P.Q. 625 (2d Cir. 1971); *SCM Corp. v. Radio Corp. of America*, 318 F. Supp. 433, 449, 167 U.S.P.Q. 196, 207-08 (S.D. N.Y. 1970).

30. The court (slip op. at 14) also concluded that denial of enforcement of patents rests not only on intentional fraud on the PTO, but also where "misrepresentations [are] made in an atmosphere of gross negligence as to their truth."

"but for" the applicant's failure to disclose the information in question, and that this was not shown here.

We feel, however, that the Fee and Sutch affidavits were clearly shown to be material to issuance of the '690 patent.<sup>10</sup> We note that the trial judge

<sup>10</sup>The Fee affidavit was submitted in an effort to overcome the Patent Examiner's initial rejection of True Temper's claims—a rejection based largely on his view that the perceptible differences between the Channeloc anchor and the pre-existing Williams patent were "of no significance and a variation in design within the realm of one skilled in the art." (IV App. 314). Although the patent was not granted immediately on receipt of that affidavit, the Examiner did state that "a showing that the [True Temper] anchor is more easily applied than prior art structures but maintains the prior art's holding character would be influential in the determination of patentability." (*Id.* at 326, emphasis added).

The Sutch affidavit was thereupon submitted together with remarks of counsel making reference to both the Fee and Sutch affidavits (*id.* 329, 343), and the subject patent was issued. It is reasonable to conclude that, had he known that the reported comparisons were inherently unreliable, the Examiner would have again denied the patent—at the least requiring True Temper to conduct more meaningful tests. [Emphasis added.]

found that "[p]laintiff failed to disclose material facts to the Patent Office and submitted evidence which was

inaccurate, incomplete and misleading.' And the court found "the failure of plaintiff to disclose relevant information to be substantial in nature." Although the trial judge here did not phrase his findings in strict terms of "but-for" causality, see *Norton v. Curtiss, supra*, 433 F.2d at 795, we feel that the findings and the record here adequately support the denial of enforcement of the patent. See *Timely Products Corp. v. Arron*, 523 F.2d 288, 297-98 [187 U.S.P.Q. 257, 263-64] (2d Cir. [1975]); *SCM Corp. v. Radio Corporation of America*, 318 F.Supp. 433, 449-50 [167 U.S.P.Q. 196, 207-08] (S.D.N.Y. [1970]). *The withheld information was material in that it was relevant and clearly significant to the consideration of the application by the Patent Office. See *Monsanto Co. v. Rohm & Haas Co.*, supra*, 456 F.2d at 599-600 [172 U.S.P.Q. at 328-29]. [Emphasis added.]

The foregoing indicates that the *True Temper* court applied the subjective "but for" test and clearly did not apply the objective "but for" test. Although an argument can be made for the "but it might have been" test, we conclude that such a test is too speculative and that the more practical test is whether the examiner would have rejected the claims had he known all of the facts.<sup>31</sup> At the same time, the subjective "but for" test holds a patent applicant to the obligation of candor and good faith required because of the "paramount [public] interest in seeing that patent monopolies spring from backgrounds free from fraud or other inequitable conduct." *Precision Instrument Manu-*

31. The subjective test does not differ greatly from the "but it might have been" test. It looks to the reasonable probability that the misrepresentation caused the examiner to approve the claims; whereas the latter looks to the possibility that the misrepresentation would have caused the examiner to approve the claims.

*facturing Co. v. Automotive Maintenance Machinery Co.*, *supra* at 816, 65 U.S.P.Q. at 138.

On the facts before us, we are not persuaded that Plastic misrepresented to the PTO the previous holding of invalidity of this court.<sup>32</sup> Continental's argument that this court's holding in the previous litigation was not based on a mere technicality (failure "to claim a combination key-thumb abutment") does not overcome the fact that any representation by Plastic regarding this court's opinion was subject to an independent evaluation by the examiner who, as related above, was furnished a copy of that opinion.<sup>33</sup>

Moreover, we are not persuaded that it was Plastic's duty, under penalty of invalidation or nonenforcement of its reissue patent for fraudulent prosecution, to provide the examiner with a copy of the district court's decision. To the extent that the district court's findings of fact and conclusions of law were material to the prosecution of the reissue application, we regard it as decisive that the examiner was put on notice of the district court's opinion by the copy of this court's opinion and by Plastic's specific reference to the district court case during that prosecution. The examiner could readily have obtained a copy of the district court's opinion, along with the briefs, record transcript, exhibits, and other documents associated with the trial, from Plastic or from the district court itself. At the same time, the record does not disclose a reasonable probability that the examiner would have

32. This case is readily distinguishable from those fraudulent prosecution cases in which the existence of the relevant prior art was not even known to the examiner, who was thus denied the opportunity for an independent evaluation.

33. Continental's argument would effectively preclude an applicant from interpreting in good faith any legal precedent or any piece of prior art before the PTO.

rejected the claims had a copy of the district court's findings of fact and conclusions of law been submitted to him.<sup>34</sup> Accordingly, we hold that the Hall Reissue was not fraudulently procured.

(3) *Intervening Rights Issue*

As related earlier, Continental argues that it has acquired intervening rights under 35 U.S.C. §252<sup>35</sup> and, thus, should not be held liable for damages for infringement of the Hall Reissue claims, saying (brief at 45):

In the instant case, it would be a travesty of justice and a denial of equity to hold that the Defendant herein [Continental] should pay any damages or compensation to this Plaintiff [Plastic] on the ground that the Defendant has infringed the reissue patent of the Plaintiff, when the Defendant made and sold only the same structure after the date of issuance

34. Because the Hall Reissue claims are significantly different from those of the Hall Patent, the necessity for making new factual determinations (such as required by *Graham v. John Deere Co.*, *supra*, on the issue of obviousness) would have been apparent to the examiner. Consequently, it is improbable that the examiner would have attached any importance to the district court's alternative holdings of invalidity. This conclusion is reinforced by the fact that, although the examiner was fully aware that there were alternative holdings of invalidity by the district court (argued by Continental to be clear from this court's previous opinion), he did not request further information.

35. Under 35 U.S.C. § 252, quoted in pertinent part in note 13, *supra*, an infringer has the unqualified right to continue to use or sell those infringing goods which were made, purchased, or used prior to the reissue grant, unless he infringes a valid claim of the reissue patent which was in the original patent. Also, the court may provide, to the extent it deems equitable, for either the conditional or unconditional continuation of the making, using, and selling of the infringing goods or process. We perceive Continental's argument to be directed to its continued right to make, use, and sell the infringing goods rather than its right to merely use or sell such goods made prior to the grant of the reissue.

of the reissue patent which it had been making and selling for at least four years prior to the time that the Plaintiff obtained its reissue patent, and which structure, in fairly and fully contested litigation between these same parties, was held not to be an infringement of the Plaintiff's originally issued, subsequently held invalid patent upon which the reissue patent is based.

This raises the question of whether equity requires that Continental be allowed to continue to make, use, and sell the infringing goods "for the protection of investments made or business commenced before the grant of the reissue."<sup>36</sup> Section 252 is an exception to the general grant to the reissue patentee of the right to exclude others from making, using, or selling the patented invention (35 U.S.C. § 271) and, as such, may only be invoked when equity requires.

The district court made no findings of fact on this question, and, assuming, *arguendo*, the truth of Continental's allegations, the record is insufficient for this court to determine whether equity requires that Continental be given the right to continue to infringe the Hall Reissue Claims.<sup>37</sup> On the basis of an affidavit of the president

36. In view of our decision on this question, it is unnecessary to reach such questions as: (1) whether intervening rights can apply to reissue claims which are narrower in scope than the original patent claims (compare *Corometrics Medical Systems, Inc. v. Berkeley Bio-Engineering, Inc.*, 193 U.S.P.Q. 467, 468 (N.D. Cal. 1977), and *Wayne-Gossard Corp. v. Moretz Hosiery Mills, Inc.*, 384 F. Supp. 63, 74-75, 183 U.S.P.Q. 601, 609 (W.D. N.C. 1974), modified, 539 F.2d 986, 191 U.S.P.Q. 543 (4th Cir. 1976), with *Wayne-Gossard Corp. v. Sondra, Inc.*, 434 F. Supp. 1340, 1362-63, 195 U.S.P.Q. 777, 796-97 (E.D. Pa. 1977), and *Wayne-Gossard Corp. v. Moretz Hosiery Mills, Inc.*, 539 F.2d 986, 990-91, 191 U.S.P.Q. 543, 546-47 (4th Cir. 1976)); (2) what, if any, effect did the prior holding of invalidity have upon Continental's intervening rights.

37. We assume the validity of the Hall Reissue claims which will be determined by the district court upon remand, as discussed *infra*.

of Continental which was attached to its motion for summary judgment, Continental alleges that it "embarked upon an extensive market investigation, and investigation of various types of safety closure," beginning in 1970; that its first "Med-Guard" safety closures<sup>38</sup> were produced and sold in August 1972, as were the Continental "Med-Vials" (the medicine containers); that, "[i]n the course of the market research and product research and development, including the patenting of certain other safety closure structures, Continental Plastics expended an amount of approximately \$33,000"; that, "[i]n tooling up for the initial production of the 'Med-Guard' safety closure structure, Continental Plastics invested approximately \$31,398";<sup>39</sup> that, in the first year of production, it invested \$9,872 in advertising the "Med-Guard" safety closure structure;<sup>40</sup> and that, as of early 1977, its "total investment in tooling and equipment necessary to manufacture, sort and sell the 'Med-Guard' safety closure structure was \$75,000."<sup>41</sup>

38. The "Med-Guard" safety closure includes an internal plug which fits in the mouth of the vial and an external cap which snaps over the outside of the vial at the mouth thereof.

39. From the record, it is not clear whether all or part of this initially "tooling up" figure is included in the cost of research and development which also would have been incurred prior to initial production.

40. Advertising and sales for the subsequent four years were:

Year	Advertising	"Med-Vial" Sales	"Med-Guard" Sales
1973	\$ 4,200.00	\$ 836,596	\$75,680
1974	\$ 3,000.00	\$ 797,567	\$63,257
1975	\$ 3,000.00	\$ 987,989	\$59,811
1976	\$17,000.00	\$1,088,153	\$49,740

41. It is the total investment "before the grant of the reissue" that may be protected, as equity demands; thus, any investment subsequent to June 15, 1976, is irrelevant to the consideration of intervening rights.

Continental seeks to continue to infringe the Hall Reissue and even expand its operations throughout the remainder of the life of the Hall Reissue without royalty fees or damages. This would effectively extinguish the patentee's rights under the guise of protecting the investment of an infringer. *See Wayne-Gossard Corp. v. Sondra, Inc.*, *supra* at 1363, 195 U.S.P.Q. at 797. Continental's activities in the safety closure field commenced subsequent to issuance of the Hall Patent in 1969,<sup>42</sup> and Continental has had the benefit of several years' production for which no damages can be assessed. During that time its sales greatly increased, possibly resulting in profits sufficient to recover what appears to have been a minimal investment.<sup>43</sup> Cf. *Wayne-Gossard Corp. v. Sondra, Inc.*, *supra*. Moreover, from the record it appears that other noninfringing goods can be manufactured from the same equipment currently being used to manufacture the infringing goods, so that not all of Continental's investment would be lost if it were precluded from infringing the Hall Reissue. Cf. *Wayne-Gossard Corp. v. Moretz Hosiery Mills, Inc.*, 447 F. Supp. 12, 16, 199 U.S.P.Q. 87, 89-90 (W.D. N.C. 1976), *after remand from* 539 F.2d 986, 191 U.S.P.Q. 543 (4th Cir. 1976).

42. Continental has presented no evidence that its activities were conducted in reliance upon the scope of the Hall Patent claims. *See Maxon Premix Burner Co. v. Mid-Continental Products Co.*, 279 F. Supp. 164, 168, 155 U.S.P.Q. 434, 445 (N.D. Ill. 1967). Absent such evidence, we need not consider the validity of Continental's argument that "a defendant who had acted upon the belief which was well founded that the original patent issued to the plaintiff was invalid, and had proceeded to invest large amounts in connection with the manufacture and sale of the accused device, thereby acquired intervening rights with respect to the plaintiff's reissue patent, and therefore could assert such defense against an infringement suit brought on the reissue patent." (Emphasis in original.)

43. Continental's alleged investment figures include marketing research as well as expenses incurred in obtaining patents on other devices.

In view of the foregoing and assuming the Hall Reissue is valid, we hold that Continental has not acquired intervening rights sufficient to justify continuing the manufacture of the infringing goods; nevertheless, equity requires that Continental be entitled to recoup its investment and to offset, against any infringement damages, the reasonable cost of converting or replacing its present equipment in order to produce noninfringing goods. *Id.* Because Continental's investments, expenditures, and recoupment through profits have not been proved with the requisite precision, and, further, because the reasonable costs of conversion have not been demonstrated, the case must be remanded for further proceedings consistent with this opinion with respect to these matters. *Cf. Wayne-Gossard v. Moretz Hosiery Mills, Inc.*, 539 F.2d 986, 991-92, 191 U.S.P.Q. 543, 547 (4th Cir. 1976); *Rohm & Haas Co. v. Chemical Insecticide Corp.*, 171 F. Supp. 426, 120 U.S.P.Q. 435 (D. Del. 1959).

#### (4) Plastic's Cross-Motion for Summary Judgment

As noted *supra* in the proceedings before the district court, Plastic cross-moved for summary judgment on infringement and validity. Because we conclude that the district court improperly granted Continental's motion for summary judgment, it is necessary to consider Plastic's motion.

##### A. Infringement

In "DEFENDANT'S ANSWER TO PLAINTIFF'S REQUESTS FOR ADMISSIONS UNDER RULE 36 OF THE RULES OF CIVIL PROCEDURE," filed February 22, 1977, Continental admitted that subsequent to June 15, 1976, it made, used, and sold a container ensemble on which claims 5 and 8 of the Hall reissue can literally be read.

It specifically admitted infringement of claim 8; and regarding claim 5, it said:<sup>44</sup>

The character of claim 5 of the reissue patent is not susceptible to precise determination or understanding. It is noted that claim 1 does not form any part of the reissue patent, and yet it is further noted that claim 5 refers to "the safety closure of claim 1 wherein", followed by a description of certain structure. It is thus not possible to determine to what structure claim 5 refers. It would appear that this claim is indefinite and incomplete on its face, and in such respect it is not possible to determine whether this claim "can literally be read" upon any container ensemble which the Defendant has made subsequent to June 15, 1976.

If claim 5 be interpreted to include all of the structural limitations from claim 1 of the original Hall patent, it is not believed that this claim can literally be read upon a container ensemble which the Defendant has made subsequent to June 15, 1976, if a key recess is interpreted to mean a hole formed through the internal closure in the manner that such recess is illustrated and described in the Reissue patent 28,861.

Further, if the structural limitations and description appearing in claim 1 of the original Hall patent be construed as incorporated into claim 5 of the reissue patent in suit, and if the second definition found in Webster's International Dictionary and the American Heritage Dictionary of the English Language be taken as the meaning of the word "coincident," then Defendant denies that claim 5 of Plaintiff's Reissue patent

44. Almost verbatim admissions were made regarding use and sale of infringing containers.

28,861 can literally be read upon any container ensemble which the Defendant has made subsequent to June 15, 1976.

If the term "coincident," as used in an integrated combination of claim 1 of the original Hall patent and claim 5 of the reissue patent, means that the recess is at the top of the container assembly while the key is at the side of the container assembly, such claim cannot be literally read on any structure which the Defendant has made since June 15, 1976.

If the term "coincident" appearing in claim 1, for purposes of attempting to answer this request for admissions, is assumed to mean "alongside" as it has been previously defined by Mr. Hall, the inventor, then claim 5 cannot literally be read upon any structure which has been manufactured or sold by the Defendant since June 15, 1976.

*If the term "coincident" as used in claim 1 of the original Hall patent, assumed for purposes of attempting to answer this request for admissions to be incorporated in claim 5, means "occupying the same position simultaneously," and provided that all of the limitations of claim 1 are so incorporated in claim 5, then claim 5 of the reissue patent in suit can be literally read upon container ensembles which have been made by the Defendant since June 15, 1976.*  
[Emphasis added.]

Since we concluded earlier that the language added to claim 5 during the reissue prosecution corrected any ambiguity regarding the definition of "coincident" and that claim 1 is specifically incorporated into claim 5, it is clear that infringement of claim 5 is admitted and that the district court should have entered summary judgment for Plastic on the infringement issue.

### B. Validity

Although we already have concluded that the adjudication of obviousness in the prior litigation has no collateral estoppel effect upon Hall Reissue claims 5 and 8, the question remains whether the subject matter as a whole of these claims would have been obvious to one of ordinary skill in the art at the time the invention was made. Plastic correctly states that the Hall Reissue claims are presumed valid (35 U.S.C. § 282); and this is particularly so where the PTO considered all of the prior art before the courts in the previous litigation. See *Scaramucci v. Dresser Industries, Inc.*, 427 F.2d 1309, 1313, 165 U.S.P.Q. 759, 762-63 (10th Cir. 1970). Nevertheless, Continental should have an opportunity to show the obviousness of the Hall Reissue claims by presenting to the district court additional prior art (not before the PTO) which it considers pertinent. See *Solder Removal Co. v. United States International Trade Commission*, 582 F.2d 628, 632, 199 U.S.P.Q. 129, 133 (C.C.P.A. 1978). The obviousness or nonobviousness of the Hall Reissue claims can then be determined in accordance with the analytical guidelines established by the Supreme Court in *Graham v. John Deere Co.*, *supra*.<sup>45</sup> We note that these guidelines do not require that, for a combination of known elements<sup>46</sup> to be nonobvious, the result achieved by the combination

45. This court's opinion in the previous litigation merely stated that because Plastic did not claim the dual function feature of the abutment key upon which it was relying, the claims were obvious. Contrary to Plastic's assertion, that opinion did not say that if the dual function feature had been claimed, the claims would have been nonobvious.

46. Most, if not all, inventions involve a combination of old or known elements. *Shaw v. E.B. & A.C. Whiting Co.*, 417 F.2d 1097, 1102, 163 U.S.P.Q. 580, 584 (2d Cir. 1969), cert. denied, 397 U.S. 1076, 165 U.S.P.Q. 417 (1970); *Reiner v. I. Leon Co.*, 225 F.2d 501, 503, 128 U.S.P.Q. 25, 27 (2d Cir. 1960), cert. denied, 366 U.S. 929, 129 U.S.P.Q. 502 (1961).

must be synergistic.<sup>47</sup> *Champion Spark Plug Co. v. Gyromat Corp.*, ..... F.2d ..... , ..... U.S.P.Q. ...., No. 78-7556, slip op. at 3598-99 (2d Cir. 1979); *Republic Industries, Inc. v. Schlage Lock Co.*, 592 F.2d 963, 970, 200 U.S.P.Q. 769, 777 (7th Cir. 1979).<sup>48</sup> "If the level of skill of a person of ordinary skill in the pertinent

47. Although the court in *True Temper*, *supra*, slip op. at 26, correctly followed the *Graham* analytical guidelines, broad dictum in its opinion suggests, without discussion, a requirement of synergism. *See also Deere & Co. v. Hesston Corp.*, 593 F.2d 956, 963, 201 U.S.P.Q. 444, 449 (10th Cir. 1979).

48. The court in *Republic Industries* said (*supra* at 971, 200 U.S.P.Q. at 778):

In enacting section 103, Congress expressly mandated non-obviousness, not synergism, as the sole test for the patentability of novel and useful inventions: indeed, synergism is not even mentioned in the Patent Act of 1952. Moreover, as section 103 applies to all patent claims, there is no justification why patentability of a combination patent should be measured by a different standard than any other type of invention.

More importantly, when using the synergism approach to determine whether one element functions differently or whether the whole somehow exceeds the parts, one is required to look solely to the operation of the elements *after* they are combined. This analysis suffers from two defects. First, a test which looks exclusively to the functioning of the individual components after they are combined must necessarily be premised on the assumption that it is always obvious to take known elements and combine them. . . .

The second and more basic defect with synergism is that section 103 sets as the standard of patentability the non-obviousness of the invention "at the time the invention was made to a person having ordinary skill in the art. . . ." This provision therefore compels the courts to view the invention from the vantage point of the field of art at a specific point in time, i.e., the time the invention was made. *See Rich, Principles of Patentability*, 28 Geo.Wash.L.Rev. 393, 405-06 (1960). From this vantage point the critical question becomes whether the level of skill in the art was such that the combining of the elements in the manner claimed would have been obvious, not in retrospect, but at the time it was done by the inventor. As the Supreme Court stated in *United States v. Adams*, 383 U.S. 39, 50, 86 S.Ct. 708, 713, 15 L.Ed.2d

(Continued on Following Page)

art is such that the differences between the subject matter sought to be patented and the prior art would not have been obvious to that person, the test for nonobviousness is met." *Champion Spark Plug Co. v. Gyromat Corp.*, *supra*, slip op. at 3599.

Accordingly, the case must be remanded for determination, consistent with this opinion, of the question of obviousness of the subject matter as a whole of Hall Reissue claims 5 and 8.<sup>49</sup>

#### (5) Attorney Fees

In its August 5, 1977, order, the district court awarded Continental its attorney fees, apparently in accordance with 35 U.S.C. § 285, which states that "[t]he court in exceptional cases may award reasonable attorney fees to the prevailing party." Entitlement to attorney fees arises from "such misconduct upon the part of the losing party as to constitute fraud on the Patent Office or [conduct] so unfair and reckless as to make it unconscionable for the prevailing party to sustain the expense of coun-

#### Footnote Continued—

572 [148 U.S.P.Q. 479, 483] (1966), a companion case to *Graham*:

It begs the question . . . to state merely that magnesium and cuprous chloride were individually known battery components. If such a combination is novel, the issue is whether bringing them together as taught by [the inventor] was obvious in the light of the prior art.

Synergism, however, precludes this analysis. Because synergism centers exclusively on the performance of the elements *after* combination and without regard to the obviousness or nonobviousness of *making the combination*, synergism does not comport with the *Graham* mandate to apply section 103.

49. We recognize Continental's right to raise at trial other questions regarding the validity of the Hall Reissue which have not been disposed of in this opinion.

sel."<sup>50</sup> *Q-Panel Co. v. Newfield*, 482 F.2d 210, 211, 178 U.S.P.Q. 521, 522 (10th Cir. 1973). The award of attorney fees under section 285 is compensatory rather than punitive. *Halliburton Co. v. Dow Chemical Co.*, 514 F.2d 377, 382, 185 U.S.P.Q. 769, 773 (10th Cir. 1975). Although the award of attorney fees is discretionary with the trial court, such an award is proper only when the case is exceptional. *Id.*; *Iron Ore Co. of Canada v. Dow Chemical Co.*, 500 F.2d 189, 195, 182 U.S.P.Q. 520, 524 (10th Cir. 1974).

It is apparent from the record that the district court set forth no conclusion of law that this case was "exceptional" within the meaning of section 285; nor did the court make any findings of fact that would support such a conclusion.

This, coupled with our holdings and conclusions set forth above, prompts us to hold that the district court's award of attorney fees to Continental was improper.

---

50. In *True Temper, supra*, slip op. at 31-32, the court said: where the plaintiff was aware of the obvious invalidity of his patent at the time he brought suit, *Tidewater Patent Development Co. v. Kitchen*, 371 F.2d 1004, 1013 [152 U.S.P.Q. 36, 656] (4th Cir. [1966]), cert. denied, 389 U.S. 821 [155 U.S.P.Q. 768 (1967)], or where the litigation once instituted was vexatious or unduly protracted, *Uarco Incorporated v. Moore Business Forms, Inc.*, 440 F.2d 580, 586 [169 U.S.P.Q. 263] (7th Cir.), cert. denied, 404 U.S. 873 [171 U.S.P.Q. 322 (1971)], the case may be deemed "exceptional" within the statute so that the prevailing defendant is saved from the undue hardship of bearing his own fees. See *Parker v. Motorola, Inc.*, 524 F.2d 518 [188 U.S.P.Q. 225] (5th Cir. [1975]), cert. denied, 425 U.S. 975 [190 U.S.P.Q. 172 (1976)]; *Seismograph Service Corp. v. Offshore Raydist, Inc.*, 263 F.2d 5 [119 U.S.P.Q. 146, modified on rehearing, 263 F.2d 24, 120 U.S.P.Q. 244] (5th Cir. [1959]); see also *L. F. Strassheim Co. v. Gold Medal Folding Furniture Co.*, 477 F.2d 818 [177 U.S.P.Q. 673] (7th Cir. [1973]).

#### SUMMARY

The district court's denial of Plastic's cross-motion for summary judgment is reversed on the issue of infringement; its dismissal of Plastic's complaint and entry of summary judgment in favor of Continental are reversed; its award to Continental of attorney fees is reversed; and the case is remanded for further proceedings, consistent with this opinion, on the question of validity of the Hall Reissue and (in the event the presumption of validity of the Hall Reissue is not overcome by Continental) on the matters pertaining to Continental's intervening rights, discussed *supra*.

REVERSED and REMANDED